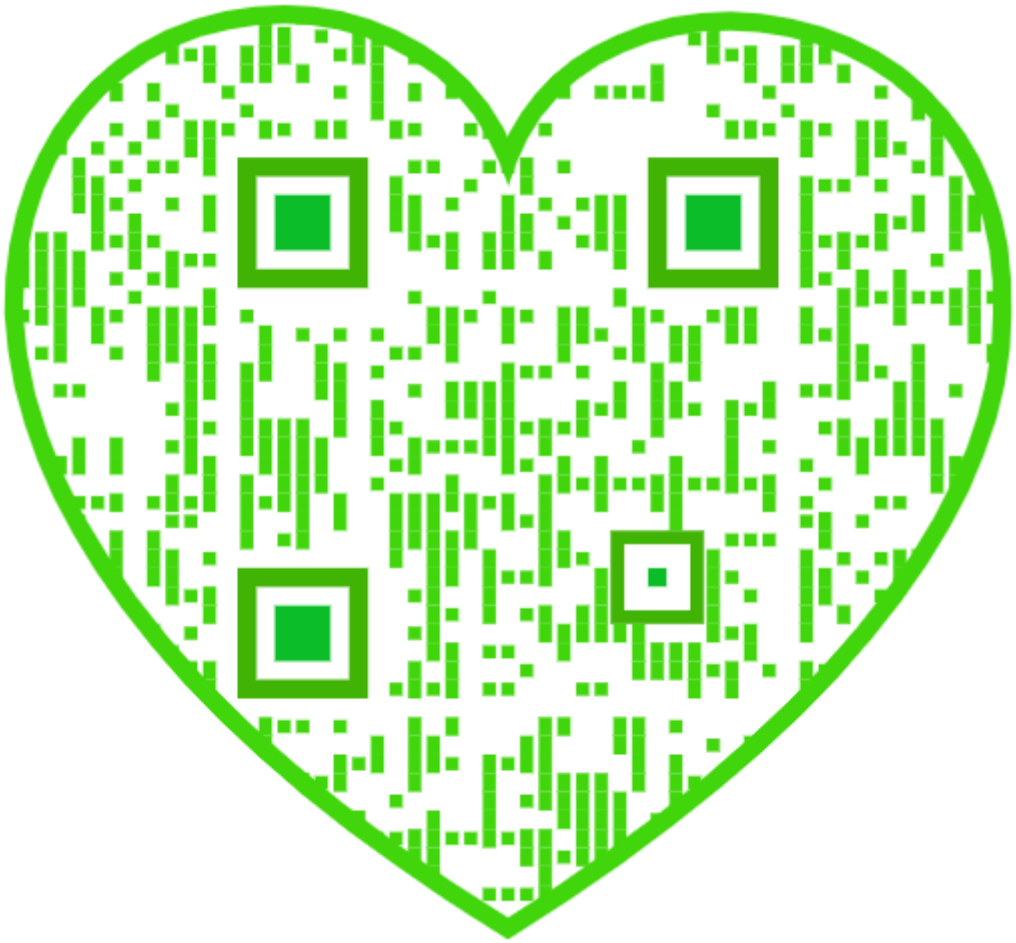

THE ARTISTIC CRAFTS SERIES
OF TECHNICAL HANDBOOKS
EDITED BY W. R. LETHABY

WOOD-CARVING: DESIGN AND WORKMANSHIP

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WOOD-CARVING DESIGN AND WORKMANSHIP

BY GEORGE JACK

WITH

DRAWINGS BY THE AUTHOR AND OTHER ILLUSTRATIONS

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1903

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EDITOR'S PREFACE

In issuing these volumes of a series of Handbooks on the Artistic Crafts, it will be well to state what are our general aims.

In the first place, we wish to provide trustworthy text-books of workshop practise, from the points of view of experts who have critically examined the methods current in the shops, and putting aside vain survivals, are prepared to say what is good workmanship, and to set up a standard of quality in the crafts which are more especially associated with design. Secondly, in doing this, we hope to treat design itself as an essential part of good workmanship. During the last century most of the arts, save painting and sculpture of an academic kind, were little considered, and there was

a tendency to look on " design " as a mere matter of *appearance*. Such " ornamentation " as there was was usually obtained by following in a mechanical way a drawing provided by an artist who often knew little of the technical processes involved in production. With the critical attention given to the crafts by Ruskin and Morris, it came to be seen that it was impossible to detach design from craft in this way, and that, in the widest sense, true design is an inseparable element of good quality, involving as it does the selection of good and suitable material, contrivance for special purpose, expert workmanship, proper finish, and so on, far more than mere ornament, and indeed, that ornamentation itself was rather an exuberance of fine workmanship than a matter of merely abstract lines. Workmanship when separated by too wide a gulf from fresh thought—that is, from design—inevitably decays, and, on the other hand, ornamentation, divorced from workmanship, is necessarily unreal, and quickly falls into affectation. Proper ornamentation

may be defined as a language addressed to the eye; it is pleasant thought expressed in the speech of the tool.

In the third place, we would have this series put artistic craftsmanship before people as furnishing reasonable occupations for those who would gain a livelihood. Although within the bounds of academic art, the competition, of its kind, is so acute that only a very few per cent can fairly hope to succeed as painters and sculptors; yet, as artistic craftsmen, there is every probability that nearly every one who would pass through a sufficient period of apprenticeship to workmanship and design would reach a measure of success.

In the blending of handwork and thought in such arts as we propose to deal with, happy careers may be found as far removed from the dreary routine of hack labor as from the terrible uncertainty of academic art. It is desirable in every way that men of good education should be brought back into the productive crafts: there are more than enough of us "in the city," and it is

probable that more consideration will be given in this century than in the last to Design and Workmanship.

. . . . . .

This third volume of our series treats of one branch of the great art of sculpture, one which in the past has been in close association with architecture. It is well, therefore, that besides dealing thoroughly, as it does, with the craftsmanship of wood-carving, it should also be concerned with the theory of design, and with the subject-matter which the artist should select to carve.

Such considerations should be helpful to all who are interested in the ornamental arts. Indeed, the present book contains some of the best suggestions as to architectural ornamentation under modern circumstances known to me. Architects can not forever go on plastering buildings over with trade copies of ancient artistic thinking, and they and the public must some day realize that it is not mere shapes, but only

thoughts, which will make reasonable the enormous labor spent on the decoration of buildings. Mere structure will always justify itself, and architects who can not obtain living ornamentation will do well to fall back on structure well fitted for its purpose, and as finely finished as may be without carvings and other adornments. It would be better still if architects would make the demand for a more intellectual code of ornament than we have been accustomed to for so long.

On the side of the carver, either in wood or in stone, we want men who will give us their own thought in their own work—as artists, that is—and will not be content to be mere hacks supplying imitations of all styles to order.

On the teaching of wood-carving I should like to say a word, as I have watched the course of instruction in many schools. It is desirable that classes should be provided with casts and photographs of good examples, such as Mr. Jack speaks of, varying from rough choppings up to minute and ex-

quisite work, but all having the breath of life about them. There should also be a good supply of illustrations and photographs of birds and beasts and flowers, and above all, some branches and buds of real leafage. Then I would set the student of design in wood-carving to make *variations* of such examples according to his own skill and liking. If he and the teacher could be got to clear their minds of ideas of "style," and to take some example simply because they liked it, and to adapt it just because it amused them, the mystery of design would be nearly solved. Most design will always be the making of one thing like another, with a difference. Later, motives from Nature should be brought in, but always with some guidance as to treatment, from an example known to be fine. I would say, for instance, "Do a panel like this, only let it be oak foliage instead of vine, and get a thrush or a parrot out of the bird book."

In regard to the application of carving, I have been oppressed by the accumulation

in carving classes of little carved squares and oblongs, having no relation to anything that, in an ordinary way, is carved. To carve the humblest real thing, were it but a real toy for a child, would be better than the production of these panels, or of the artificial trivialities which our minds instinctively associate with bazaars.

W. R. LETHABY.

September, 1903.

AUTHOR'S PREFACE

To the Reader,

Be you 'prentice or student, or what is still better, both in one, I introduce the following pages to you with this explanation: that all theoretical opinions set forth therein are the outcome of many years of patient sifting and balancing of delicate questions, and these have with myself long since passed out of the category of mere "opinions" into that of settled convictions. With regard to the practical matter of "technique," it lies very much with yourself to determine the degree of perfection to which you may attain. This depends greatly upon the amount of application which you may be willing or able to devote to its practise. Author's Preface

Remember—the laws which govern all

good art must be known before they can be obeyed; they are subtle, but unalterable. The conditions most favorable to your craft must first be understood before these laws can be recognized. There yet remains at your own disposal that devotion of energy which is the first essential step, both in the direction of obtaining clearer views and in conquering technical difficulties.

I have to thank the following gentlemen for their assistance in providing photographs for some of the illustrations: Messrs. Bedford Lemere & Co.—H. Sandland—Charles C. Winmill—W. Weir—J. R. Holliday and F. K. Rives.

G. J.

September, 1903.

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CHAPTER I

PREAMBLE

Student and Apprentice, their Aims and Conditions of Work — Necessity for some Equality between Theory and Practise — The Student's Opportunity lies on the Side of Design.

Preamble

THE study of some form of handicraft has of late years become an important element in the training of an art student. It is with the object of assisting such with practical directions, as well as suggesting to more practised carvers considerations of design and treatment, that the present volume has been written. The art of wood-carving, however, lends itself to literary demonstration only in a very limited way, more especially in the condensed form of a text-book, which must be looked upon merely as a temporary guide, of use only until such time as practise and study shall have strengthened the judgment of the student, and enabled

him to assimilate the many and involved principles which underlie the development of his craft.

If the beginner has mastered to some extent the initial difficulties of the draftsman, and has a fair general knowledge of the laws of design, but no acquaintance with their application to the art of wood-carving, then the two factors which will most immediately affect his progress (apart from natural aptitude) are his opportunities for practise, and his knowledge of past and present conditions of work. No one can become a good carver without considerable practise—constant, if the best results are to be looked for. Just as truly, without some knowledge of past and existing conditions of practise, none may hope to escape the danger of becoming, on the one hand, dull imitators of the superficial qualities of old work; or on the other, followers of the first will-o'-the-wisp novelty which presents itself to their fancy.

If use of the tools and knowledge of materials were the only subjects of which a carver need become master, there would be no way equal to the old-fashioned one of apprenticeship to some good craftsman.

Daily practise with the tools insures a manual dexterity with which no amateur need hope to compete. Many traditional expedients are handed down in this way that can be acquired in no other. There is, however, another side of the question to be considered, of quite as much importance as the practical one of handicraft skill. The art of wood-carving has also to fulfil its intellectual function, as an interpreter of the dreams and fancies of imagination. In this respect there is little encouragement to be looked for in the dull routine of a modern workshop.

There are, therefore, two widely separated standpoints from which the art may be viewed. It may be looked at from the position of a regular craftsman, who regards it primarily as his means of livelihood; or it may be dealt with as a subject of intellectual interest, based upon its relation to the laws of art in general. As, in the first instance, the use of the tools can not be learned without *some* accompanying knowledge of the laws of art, however slight that acquaintance may be, the method of apprenticeship has the advantage of being the more practical of the two; but it must be accepted with all the

conditions imposed upon it by the pressure of commercial interest and its usages: conditions, which, it may easily be imagined, are far more favorable to the performance of dull task-work, than to the adventurous spirit of curiosity which should prompt the enterprise of an energetic student.

On the other hand, although an independent study of the art offers a wider range of interest, the student is, for that very reason, exposed to the risk of involving himself in a labyrinth of confusing and ineffectual theories. The fact is, that neither method can at the present time be exclusively depended upon as a means of development; neither can be pronounced complete in itself nor independent of the other. The only sure safeguard against the vagueness of theory is constant practise with the tools; while, to the craftsman in the full enjoyment of every means for exercising and increasing his technical skill, a general study and intelligent conception of the wide possibilities of his art is just as essential, if it were only as an antidote to the influence of an otherwise mechanical employment. The more closely these contradictory views are made

to approximate, the more certain will become the carver's aims, and the clearer will be his understanding of the difficulties which surround his path, enabling him to choose that which is practicable and intrinsically valuable, both as regards the theory and practise of his art.

If the student, through lack of opportunities for practise, is debarred from all chance of acquiring that expertness which accompanies great technical skill, he may at least find encouragement in the fact that he can never exhaust the interest afforded by his art in its infinite suggestion to the imagination and fancy; and also that by the exercise of diligence, and a determination to succeed, he may reasonably hope to gain such a degree of proficiency with the tools as will enable him to execute with his hands every idea which has a definite existence in his mind. Generally speaking, it will be found that his manual powers are always a little in advance of his perceptions.

Thus the student may gradually work out for himself a natural and reliable manner of expressing his thoughts, and in a way, too, that is likely to compensate for his technical shortcomings, by exciting

a more lively interest in the resources of the art itself. The measure of his success will be determined partly by his innate capacity for the work, and partly by the amount of time which he is enabled to give to its practise. The resources of his art offer an infinite scope for the exercise of his powers of design, and as this is the side which lies nearest to his opportunities it should be the one which receives his most earnest attention, not merely as experiments on paper, but as exercises carried out to the best of his ability with the tools. Such technical difficulties as he may encounter in the process will gradually disappear with practise. There is also encouragement in the thought that wood-carving is an art which makes no immediate calls upon that mysterious combination of extraordinary gifts labeled "genius," but is rather one which demands tribute from the bright and happy inspirations of a normally healthy mind. There is, in this direction, quite a life's work for any enthusiast who aims at finding the bearings of his own small but precious gift, and in making it intelligible to others; while, at the same time, keeping himself free from the many confusions and affectations which surround him in the endeavor.

CHAPTER II

TOOLS

Average Number of Tools required by Carvers—Selection for Beginners—Description of Tools—Position when in Use—Acquisition by Degrees.

Tools

We will suppose that the student is anxious to make a practical commencement to his studies. The first consideration will be to procure a set of tools, and we propose in this place to describe those which will answer the purposes of a beginner, as well as to look generally at others in common use among craftsmen.

The tools used by carvers consist for the most part of chisels and gouges of different shapes and sizes. The number of tools required by professional carvers for one piece of work varies in proportion to the elaborateness of the carving to be done. They may use from half a dozen on simple work up to twenty or thirty for the

more intricate carvings, this number being a selection out of a larger stock reaching perhaps as many as a hundred or more. Many of these tools vary only in size and sweep of cutting edge. Thus, chisels and gouges are to be had ranging from $\frac{1}{16}$th of an inch to 1 inch wide, with curves or "sweeps" in each size graduated between a semicircle to a curve almost flat. Few carvers, however, possess such a complete stock of tools as would be represented by one of each size and shape manufactured; such a thing is not required: an average number of, say seventy tools, will always give a sufficient variety of size and sweep for general purposes; few pieces of work will require the use of more than half of these in its execution.

The beginner, however, need not possess more than from twelve to twenty-four, and may even make a start with fewer. It is a good plan to learn the uses of a few tools before acquiring a complete set, as by this means, when difficulties are felt in the execution of work, a tool of known description is sought for and purchased with a foreknowledge of its advantages. This is the surest way to gain a distinct knowledge of the varieties of each kind of tool, and

their application to the different purposes of design.

The following list of tools (see Figs. 1 and 2) will be found sufficient for all the occasions of study: beginning by the purchase of the first section, Nos. 1 to 17, and adding others one by one until a set is made up of twenty-four tools. The tools should be selected as near the sizes and shapes shown in the illustration as possible. The curved and straight strokes represent the shape of the actual cuts made by pressing the tools down perpendicularly into a piece of wood. This, in the case of gouges, is generally called the "sweep."

Nos. 1, 2, 3 are gouges, of sweeps varying from one almost flat (No. 1) to a distinct hollow in No. 3. These tools are made in two forms, straight-sided and "spade"-shaped; an illustration of the spade form is given on the second page of tools. In purchasing his set of tools the student should order Nos. 1, 2, 3, 10, 11 in this form. They will be found to have many advantages, as they conceal less of the wood behind them and get well into corners inaccessible to straight-sided tools. They are lighter and more easily sharpened, and are very necessary in finishing the sur-

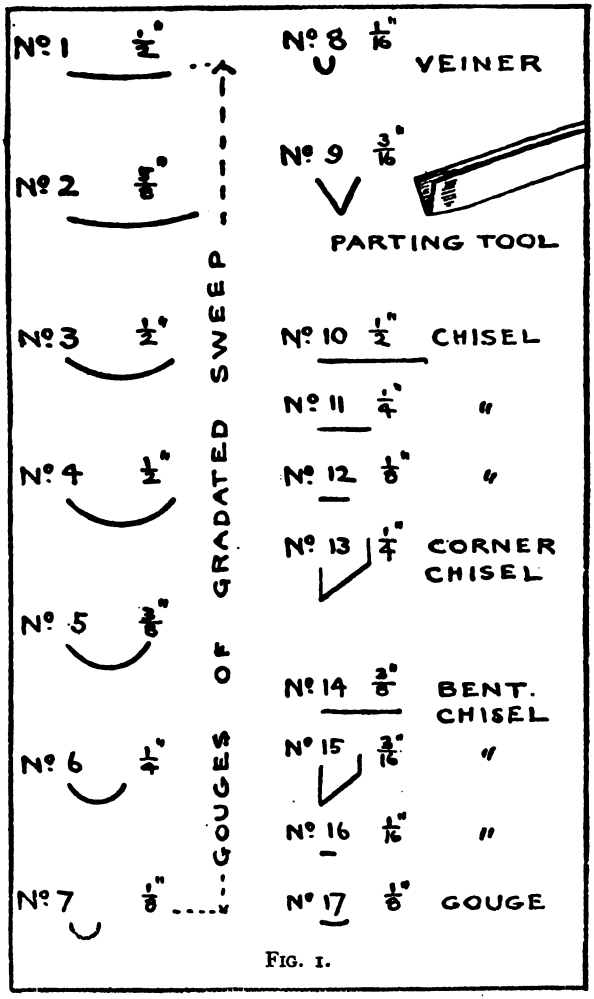

Nº 1 1/2"
Nº 2 5/8"
Nº 3 1/2"
Nº 4 1/2"
Nº 5 3/8"
Nº 6 1/4"
Nº 7 1/8"
GRADATED SWEEP OF GOUGES
Nº 8 1/16" VEINER
Nº 9 3/16"
PARTING TOOL
Nº 10 1/2" CHISEL
Nº 11 1/4" "
Nº 12 1/8" "
Nº 13 1/4" CORNER CHISEL
Nº 14 3/8" BENT. CHISEL
Nº 15 3/16" "
Nº 16 1/16" "
Nº 17 1/8" GOUGE

FIG. 1.

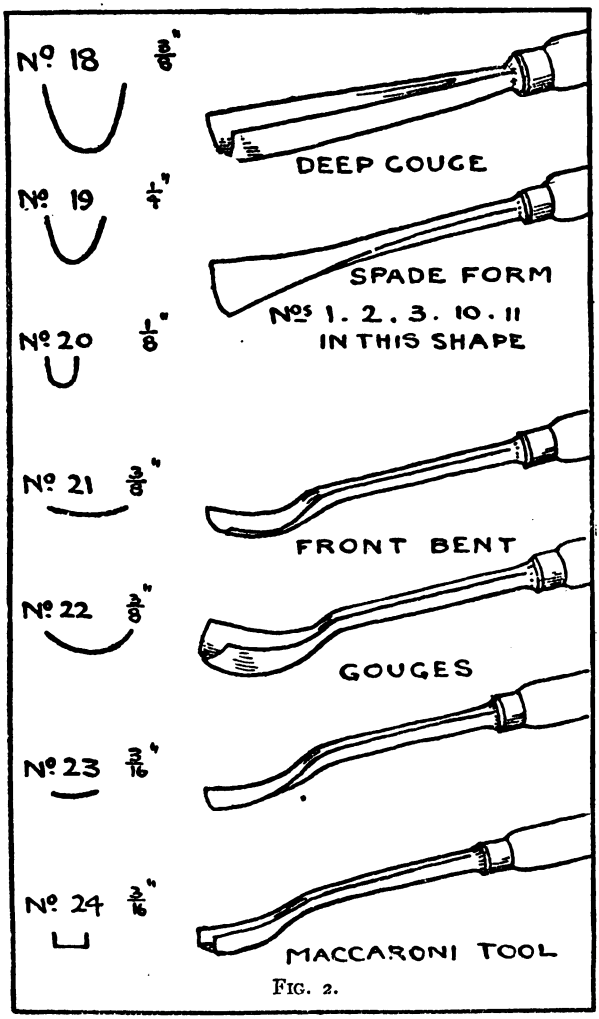

No 18
3/8"
DEEP GOUGE
No 19
1/4"
SPADE FORM
Nos 1. 2. 3. 10. 11
IN THIS SHAPE
No 20
1/8"
No 21
3/8"
FRONT BENT
No 22
3/8"
GOUGES
No 23
3/16"
No 24
3/16"
MACCARONI TOOL

FIG. 2.

face of work, and in shaping out foliage, more especially such as is undercut.

Nos. 5, 6, 7 are straight gouges graduated in size and sweep. No. 8 is called a Veiner, because it is often used for making the grooves which represent veins in leaves. It is a narrow but deep gouge, and is used for any narrow grooves which may be required, and for outlining the drawing at starting.

No. 9 is called a V tool or "parting" tool, on account of its shape. It is used for making grooves with straight sides and sharp inner angles at the bottom. It can be used for various purposes, such as undercutting, clearing out sharply defined angles, outlining the drawing, etc., etc. It should be got with a square cutting edge, not beveled off as some are made. Nos. 10, 11, 12 are flat chisels, or, as they are sometimes called, "firmers." (Nos. 10 and 11 should be in spade shape.) No. 13 is also a flat chisel, but it is beveled off to a point, and is called a "corner-chisel"; it is used for getting into difficult corners, and is a most useful tool when used as a knife for delicate edges or curves.

Nos. 14 and 16 are what are known as "bent chisels"; they are used principally

for leveling the ground (or background), and are therefore also called "grounders." These tools are made with various curves or bends in their length, but for our present uses one with a bend like that shown to tool No. 23, Fig. 2, and at *a* in Fig. 3, will be best; more bend, as at *b*, would only make the tool unfit for leveling purposes on a flat ground.

No. 15 is a similar tool, but called a "corner grounder," as it is beveled off like a corner-chisel.

No. 17 is an additional gouge of very slow sweep and small size. This is a very handy little tool, and serves a variety of purposes when you come to finishing the surface.

These seventeen tools will make up a very useful set for the beginner, and should serve him for a long time, or at least until he really begins to feel the want of others; then he may get the remainder shown on Fig. 2.

Nos. 18, 19, 20 are deep gouges, having somewhat straight sides; they are used where grooves are set deeply, and when they are required to change in section from deep and narrow to wide and shallow. This is done by turning the

tool on its side, which brings the flatter sweep into action, thus changing the shape of the hollow. Nos. 21, 22 are gouges, but are called "bent gouges"—"front bent" in this case, "back bent" when the cutting "sweep" is turned upside down. It is advisable when selecting these tools to get them as shown in the illustration, with a very easy curve in their bend; they are more generally useful so, as quick bends are only good for very deep hollows. These tools are used for making grooves in hollow places where an ordinary gouge will not work, owing to its meeting the opposing fiber of the wood.

No. 23 is a similar tool, but very "easy" both in its "sweep" and bend—the sweep should be little more than recognizable as a curve. This tool may be used as a grounder when the wood is slightly hollow, or liable to tear up under the flat grounder.

No. 24 is called a "Maccaroni" tool. This is used for clearing out the ground close against leaves or other projections; as it has two square sides it can be used right and left.

In the illustration, Fig 3, *a* shows the best form of grounding tool; *b* is little

or no use for this purpose, as it curves up too suddenly for work on a flat ground. It is a good thing to have the handles of tools made of different colored woods, as it assists the carver in picking them out quickly from those lying ready for use. Handles

When in use, the tools should be laid

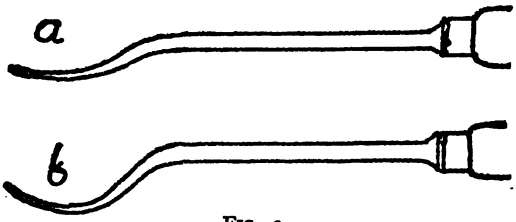


FIG. 3.

out in front of the carver if possible, and with their points toward him, in order that he may see the shape and choose quickly the one he wants.

The tempering of tools is a very important factor in their efficiency. It is only of too common occurrence to find many of the tools manufactured of late years unfit for use on account of their softness of metal. There is nothing more vexatious to a carver than working with a Tempering

tool which turns over its cutting edge, even in soft wood; such tools should be returned to the agent who sold them.

With a selection from the above tools, acquired by degrees in the manner described, almost any kind of work may be done. There is no need whatever to have a tool for every curve of the design. These can readily be made by using straight chisels in combination with such gouges as we possess, or by sweeping the curves along their sides with a chisel used knife fashion. No really beautiful curves can be made by merely following the curves of gouges, however various their sweeps, as they are all segments of circles.

Tools generally come from the manufacturer ground, but not sharpened. As the student must in any case learn how to sharpen his tools, it will be just as well to get them in that way rather than ready for use. As this process of sharpening tools is a very important one, it must be reserved for another place. Should tools be seriously blunted or broken they must be reground. This can be done by the carver, either on a grindstone or a piece of gritty York stone, care being taken to repeat the original bevel; or they may be sent to a tool

shop where they are in the habit of grinding carving tools. Tools

Catalogues of tools may be had from good makers; they will be found to consist mainly in a large variety of the tools already mentioned. Those which are very much bent or curved are intended for special application to elaborate and difficult passages in carving, and need not concern the student until he comes to find the actual want of such shapes; such, for instance, as bent parting tools and back bent gouges.

In addition to the above tools, carvers occasionally use one called a "Router." This is a kind of plane with a narrow perpendicular blade. It is used for digging or "routing" out the wood in places where it is to be sunk to form a ground. It is not a tool to be recommended for the use of beginners, who should learn to make sufficiently even backgrounds without the aid of mechanical contrivances. Carvers also use the "Rifler," which is a bent file. This is useful for very fine work in hard wood, and also for roughly approximating to rounded forms before finishing with the tools. Routers and Riflers

A few joiner's tools are very useful to Joiner's Tools

Tools

the carver, and should form part of his equipment. A wide chisel, say about 1¼ in. wide, a small iron "bull-nose" plane, and a keyhole saw, will all be helpful, and save a lot of unnecessary labor with the carving tools.

CHAPTER III

SHARPENING-STONES—MALLET AND BENCH

Different Stones in use—Case for Stones—Slips—Round Mallet Best—A Home-Made Bench—A Makeshift Bench—Cramps and Clips.

Sharpening Stones

THE stones which are most generally used for the purpose of sharpening carving tools are "Turkey" and "Washita." There are many others, some equally good, but "Washita" is easily procured and very serviceable. It is to be had in various grades, and it may be just as well to have one coarse and one fine, but in any case we must have a fine-grained stone to put a keen edge on the tools. A "Turkey" stone is a fine-grained and slow-cutting one, and may take the place of the finer "Washita." The "India" oilstone is a composition of emery with some kind of stone dust, and

is a useful stone for quickly rubbing down superfluous steel before putting an edge to the tool. It is better to get these stones without cases, as they can then be used on both sides, one for flat tools and one for gouges, which wear the face of a stone into grooves. A case may be made by hollowing out a block of wood so as to take the stone loosely; and if at one end a small notch is made in this block, a screwdriver may be inserted under the stone when it is necessary to turn it. Two brads or pins should be inserted in holes, having their points just appearing

Sharpening Stones

FIG. 4.

below the bottom of the block. These prevent it slipping about when in use. These stones should be lubricated with a mixture of olive oil and paraffin in equal parts. Bicycle lubricating oil is very good for this purpose.

For sharpening the insides of tools, "slips" are made with rounded edges of different sizes. One slip of "Washita"

Sharpening Stones

stone and one of "Arkansas" will be enough for the present, as they will fit moderately well most of the gouges in the beginner's set of tools; the "Arkansas" being used for the smaller tools. The "Arkansas" slip should be what is called "knife-edged." This is required for sharpening such tools as the veiner and V tool; it is a very fine marble-like stone, and exceedingly brittle; care must be taken in handling it, as a fall would in all probability be fatal.

THE BENCH AND MALLET

The Bench and Mallet

The Mallet.—The carver's mallet is used for driving his tools where force is required. The most suitable form is the round one, made of beech; one 4 ins. diameter will be heavy enough.

The Bench.—Every carver should provide himself with a bench. He may make one for himself according to the size and construction shown in the illustration, Fig. 5. The top should be made of two 11×2 in. boards, and, as steadiness is the main feature to be aimed at, the joints should have some care. Those in illustration are shown to be formed by checking

one piece of wood over the other, with shoulders to resist lateral strain. Proper tenons would be better, but more difficult to make. It must have a projecting edge at the front and ends, to receive the clamps. The bench should have a joiner's "bench-

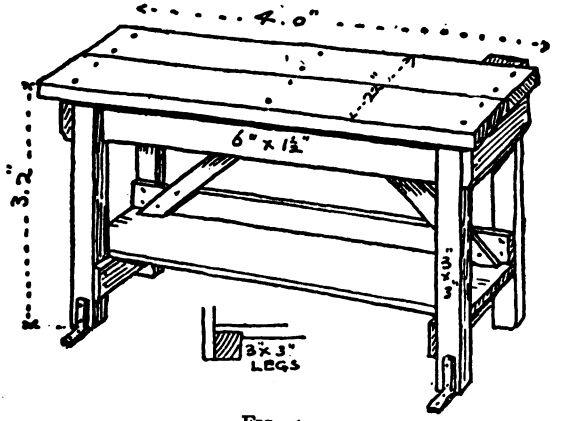


FIG. 5.

screw" attached to the back leg for holding work which is to be carved on its edges or ends. The feet should be secured to the floor by means of iron brackets, as considerable force is applied in carving hard wood, which may move the bench bodily, unless it is secured, or is very heavy. Professional carvers use a bench

The Bench which is composed of beech planks, three or four inches in thickness, and of length according to shop-room.

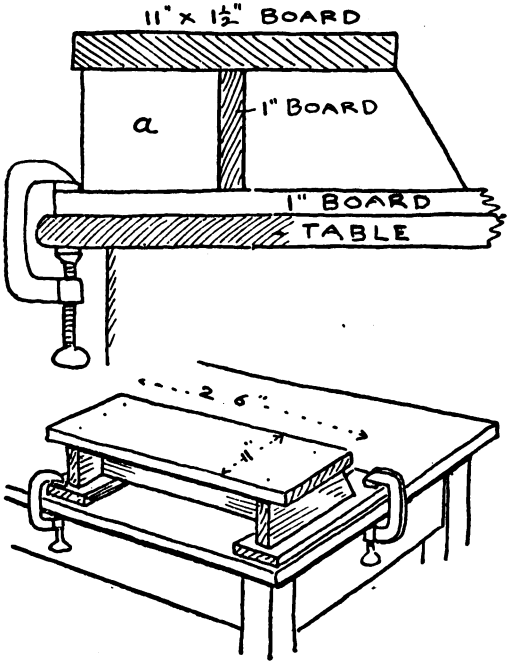


Fig. 6

Should it not be possible to make or procure a bench, then a substitute must be used. Fig. 6 gives a suggestion for

making such a temporary bench. The top is composed of one piece of board, 11 ins. wide and 1½ in. thick. It should be about 2 ft. 6 ins. long and rest on two blocks fixed about 1½ in. from the ends, which must project, as in Fig. 6. This may be used on any ordinary table, to which it should be secured by means of two 3½-in. clamps. The height from the floor should be 3 ft. 2 ins. to top of board. This gives a good height for working, as carvers invariably stand to their work. The height can be regulated by making the blocks, *a*, higher or lower to suit the table which is to be used.

The Bench

Cramps.—Cramps for holding the work in position on the bench are of several kinds. For ordinary thicknesses of wood, two 4½-in. screw clamps, like the one in Fig. 7, will be sufficient. Wooden blocks may be also used to hold one end of the work down while the other is held by a clamp. These blocks

Cramps and Holdfasts

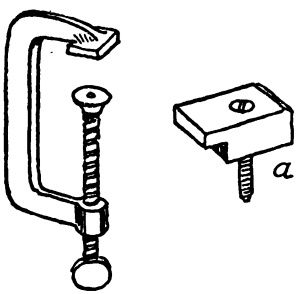


Fig. 7.

Cramps and Holdfasts

are notched out to fit over the thickness of the board being carved, as in Fig. 7. Carvers use for their heavier work a "bench-screw," as it is called; that is, a screw which passes through the bench into the back of the work, which may thus be turned about at will; also, if the work is very thick, they hold it in position by means of a bench "holdfast," a kind of combined lever and screw; but neither of these contrivances is likely to be required by the beginner, whose work should be kept within manageable dimensions.

CHAPTER IV

WOODS USED FOR CARVING

Hard Wood and Soft Wood—Closeness of Grain Desirable—Advantages of Pine and English Oak.

Woods used for Carving

THE woods suitable for carving are very various; but we shall confine our attention to those in common use. Of the softer woods, those which are most easily procured and most adaptable to modern uses are yellow pine, Bas wood, Kauri pine, and Lime. These are all good woods for the carver; but we need not at present

look for any better qualities than we shall find in a good piece of yellow pine, free from knots or shakes.

Woods used for Carving

The following woods may be considered as having an intermediate place between soft and hard: Sycamore, Beech, and Holly. They are light-colored woods, and very useful for broad shallow work.

English Oak.—Of the hard woods in common use, the principal kinds are Oak, Walnut, and occasionally Mahogany. Of oak, the English variety is by far the best for the carver, being close in the grain and very hard. It is beyond all others the carvers' wood, and was invariably used by them in this country during the robust period of medieval craftsmanship. It offers to the carver an invigorating resistance to his tools, and its character determines to a great extent that of the work put upon it. It takes in finishing a very beautiful surface, when skilfully handled—and this tempts the carver to make the most of his opportunities by adapting his execution to its virtues. Other oaks, such as Austrian and American, are often used, but they do not offer quite the same tempting opportunity to the carver. They are, by nature, quicker-growing trees, and are, conse-

Woods used for Carving

quently, more open in the grain. They have tough, sinewy fibers, alternating with softer material. They rarely take the same degree of finish as the English oak, but remain somewhat dull in texture. Good pieces for carving may be got, but they must be picked out from a quantity of stuff. Chestnut is sometimes used as a substitute for oak, but it is better fitted for large-scaled work where fineness of detail is not of so much importance.

Italian Walnut.—This is a very fine-grained wood, of even texture. The Italian variety is the best for carving: it cuts with something of the firmness of English oak, and is capable of receiving even more finish of surface in small details. It is admirably suited for fine work in low relief. In choosing this wood for carving, the hardest and closest in grain should be picked, as it is by no means all of equal quality. It should be free from sap, which may be known by a light streak on the edges of the dark brown wood.

English walnut has too much "figure" in the grain to be suitable for carving. American walnut is best fitted for sharply cut shallow carving, as its fiber is caney. If it is used, the design should be one in which

no fine modeling or detail is required, as this wood allows of little finish to the surface. Woods used for Carving

Mahogany, more especially the kind known as Honduras, is very similar to American walnut in quality of grain: it cuts in a sharp caney manner. The "Spanish" variety was closer in grain, but is now almost unprocurable. Work carved in mahogany should, like that in American walnut, be broad and simple in style, without much rounded detail.

It is quite unnecessary to pursue the subject of woods beyond the few kinds mentioned. Woods such as ebony, sandalwood, cherry, brier, box, pear-tree, lancewood, and many others, are all good for the carver, but are better fitted for special purposes and small work. As this book is concerned more with the *art* of carving than its application, it will save confusion if we accept yellow pine as our typical soft wood, and good close-grained oak as representing hard wood. It may be noted in passing that the woods of all flowering and fruit-bearing trees are very liable to the attack of worms and rot.

No carving, in whatever wood, should be polished. I shall refer to this when we come to "texture" and "finish."

CHAPTER V

SHARPENING THE TOOLS

The Proper Bevel—Position of Tools on Oilstone—Good and Bad Edge—Stropping—Paste and Leather—Careless Sharpening—Rubbing Out the Inside—Stropping Fine Tools—Importance of Sharp Tools.

Sharpening the Tools

HAVING given this brief description of the tools and materials used by carvers, we shall suppose a piece of work is about to be started. The first thing the carver will require to do is to sharpen his tools. That is, if we may assume that they have just come from the manufacturer, ground but not yet brought to an edge. It will be seen that each has a long bevel ending in a blunt ridge where the cutting edge should be. We shall take the chisel No. 10 and sharpen that first, as it is the easiest to do, and so get a little practise before we try the gouges. The oilstone and oil have already been described. The first thing is to well oil the stone and lay it on the bench in a position with its end toward the operator.

Tools which are going to be used in

soft wood require rather a longer bevel and more acute edge than when they are wanted for hard wood. Both angles are shown in Fig. 8. Lay the flat of the tool

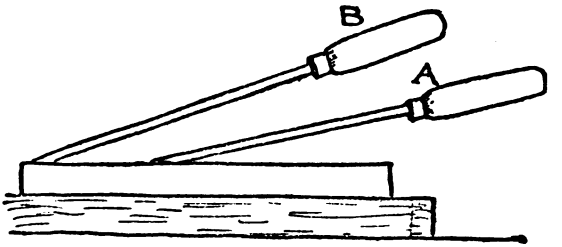
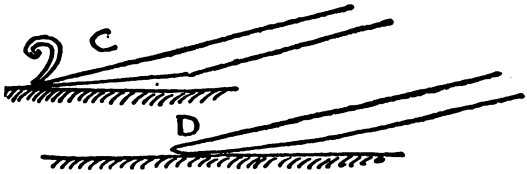


FIG. 8.

on the stone at an angle of about 15°, with the handle in the hollow of the right hand, and two fingers of the left pressed upon the blade as near to the stone as possible. Then begin rubbing the tool from end to end of the stone, taking care not to rock the right hand up and down, but to keep it as level as possible throughout the stroke, bearing heavily on the blade with the left hand, to keep it well in contact with the stone. Rocking produces a rounded edge which is fatal to keenness.

Sharpening the Tools

C (Fig. 9) gives approximately, to an enlarged scale, the sections of a good edge, and D that of an imperfect one.



C - GOOD CUTTING EDGE

D - BADLY FORMED EDGE

FIG. 9.

Practise alone will familiarize the muscles of the wrist with the proper motion, but it is important to acquire this in order to form the correct habit early. It should be practised very slowly at first, until the hands get accustomed to the movements. When one side of the tool has been rubbed bright as far as the cutting edge, turn it over and treat the other in the same way. Carvers' tools, unlike joiners', are rubbed on both sides, in the proportion of about two-thirds outside to one-third inside. When a keen edge has been formed, which can easily be tested by gently applying the finger, it should be stropped on a piece of stout leather. It will be found, if the finger

is passed down the tool and over its edge, that the stoning has turned up a burr. This must be removed by stropping on both sides alternately. A paste composed of emery and crocus powders mixed with grease is used to smear the leather before stropping; this can either be procured at the tool shop, or made by the carver. When the tool has been sufficiently stropped, and all burr removed, it is ready for use, but it is as well to try it on a piece of wood first, and test it for burr, and if necessary strop it again.

Before we leave this tool, however, we shall anticipate a little, and look at it after it has been used for some time and become blunt. Its cutting edge and the bevel above it are now polished to a high degree, owing to friction with the wood. We lay it on the stone, taking care to preserve the original angle (15°). We find on looking at the tool after a little rubbing that this time it presents a bright rim along the edge in contrast with the gray steel which has been in contact with the stone. This bright rim is part of the polished surface the whole bevel had before we began this second sharpening, which proves that the actual edge has not yet touched the stone.

We are tempted to lift the right hand ever so little, and so get rid of this bright rim (sometimes called the "candle"); we shall thus get an edge quicker than if we have to rub away all the steel behind it. We do this, and soon get our edge; the bright rim has disappeared, but we have done an unwise thing, and have not saved much time, because we have begun to make a rounded edge, which, if carried a little farther, will make the tool useless until it is reground. There is no help for it: time must be spent and trouble taken in sharpening tools; with method and care there need be very little grinding, unless tools are actually broken.

To resume our lesson in tool-sharpening: we can not do much carving with one chisel, so we shall now take up gouge No. 2 as being the least difficult. This being a rounded tool, we must turn the stone over and use the side we have determined to keep for gouges, etc. We commence rubbing it up and down the stone in the same manner as described for the chisel, but, in addition, we have now another motion. To bring all the parts of the edge into contact with the stone the gouge must be rolled from side to side

as it goes up and down. To accomplish this the wrist should be slowly practised until it gets into step with the up and down motions; it matters very little whether one turn of the tool is given to one passage along the stone, or only one

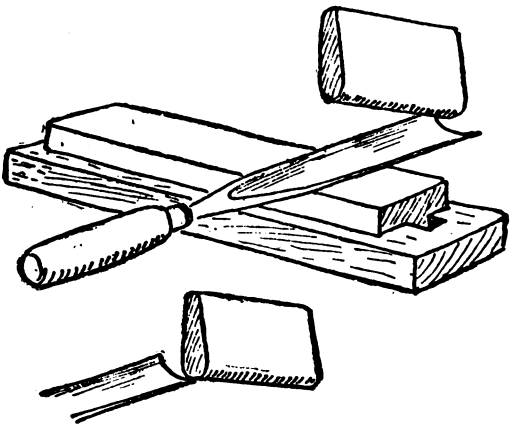


FIG. 10.

turn to many up and down rubbings. The main thing is evenness of rubbing all along the circular edge, as if one part gets more than its share the edge becomes wavy, which is a thing to be avoided as much as possible. When the outside has been cleanly rubbed up to the edge, the inside

is to be rubbed out with the Washita slip and oil to the extent of about half as much as the outside. The handle of the tool should be grasped in the left hand, while its blade rests on a block of wood, or on the oilstone. Hold the slip between the fingers and thumb, slanting a little over the inner edge, and work it in a series of short downward strokes, beginning the stroke at one corner of the gouge and leaving off at the other (see Fig. 10). Strop the outside of the tool, and test for burr, then lay the leather over the handle of another tool and strop the inside, repeating the operation until all burr has been removed, when probably the tool will be ready for use.

The Veiner requires the same kind of treatment, only as this tool is not part of a circle in its section (having straight sides), only one-half must be done at a time; and it is as well to give the straight sides one stroke or so in every half-dozen all to itself to keep it in shape. Care must be taken with this tool as it is easily rubbed out of shape. The inside must be finished off with the Arkansas knife-edged slip, one side at a time, as it is impossible to sweep out the whole section of these

deep tools at one stroke. Stropping must follow as before, but as this tool is so small that the leather will not enter its hollow, the leather must be laid down flat and the hollow of the tool drawn along its edge until it makes a little ridge for itself which fills the hollow and clears off burr (see Fig. 11); if any such adheres outside, a

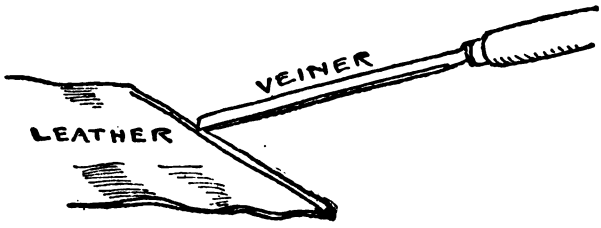


Fig. 11.

slight rub on the Arkansas stone will probably remove it. When the edges of the tools begin to get dull, it often happens that they only require to be stropped, which should be frequently done. As the treatment of all gouges is more or less like what has been described, practise will enable the student to adapt it to the shape of the tool which requires his attention. There remains only the V tool, the Spoon tools, and the Maccaroni, which all require special attention. The point of the V

tool is so acute that it becomes difficult to clear the inside. A knife-edged slip is used for this purpose, and it is well also to cut a slip of wood to a thin edge, and after rubbing it with paste and oil, pass it down frequently over the point between the sides. Unless a very sharp point is obtained, this tool is practically useless; the least speck of burr or dulness will stop its progress or tear up the wood. In sharpening it, the sides should be pressed firmly on the stone, watching it every now and then to see what effect is being produced. If a gap begins to appear on one side, as it often does, then rub the other side until it disappears, taking care to bear more heavily on the point of the tool than elsewhere. If the sides get out of shape, pass the tool along the stone, holding it at right angles to the side of the stone, but at the proper angle of elevation; in this case the tool is held near its end, between fingers and thumb. Spoon tools must be held to the stone at a much higher angle until the cutting edge is in the right relation to the surface, or they may be drawn sidewise along it, taking care that every part of the edge comes in contact and receives an equal amount of

rubbing. These may be treated half at a time, or all round, according to the size and depth of the tool. However it is produced, the one thing essential is a long straight-sectioned cutting bevel, not a rounded or obtuse one. Strop the inside by folding up the leather into a little roll or ball until it fills the hollow of the tool. Sharpening the Tools

For the small set of tools described in Chapter II one flat oilstone and two slips will be found sufficient for a beginning, but as a matter of fact, it will be advisable, as the number of tools is enlarged, to obtain slips of curves corresponding to the hollows of all gouges as nearly as possible. Many professional carvers have sets of these slips for the insides of tools, varying in curves which exactly fit every hollow tool they possess, including a triangular one for the inside of the V tool. The same rule sometimes applies to the sweeps of the outsides of gouges, for these, corresponding channels are ground out in flat stones, a process which is both difficult and laborious. If the insides are dealt with on fitting slips, which may be easily adapted to the purpose by application to a grindstone, the outsides are not Slips

so difficult to manage, so that grooved stones may be dispensed with.

Before we leave the subject of sharpening tools it will be well to impress upon the beginner the extreme importance of keeping his tools in good order. When a tool is really sharp it whistles as it works; a dull tool makes dull work, and the carver loses both time and temper. There can be no doubt that the great technical skill shown in the works of Grinling Gibbons and his followers could not have been arrived at without the help of extraordinarily sharp tools. Tools not merely sharpened and then used until they became dull, but tools that were always sharp, and never allowed to approach dulness. Sharpening tools is indeed an art in itself, and like other arts has its votaries, who successfully conquer its difficulties with apparent ease, while others are baffled at every point. Impatience is the stumbling-block in such operations. Those most painstaking people, the Chinese, according to all accounts, put magic into their sharpening stones; the keenness of their blades being only equaled by that of their wits in all such matters of delicate application. To make a good beginning is

a great point gained. To carefully examine every tool, and at the expense of time correct the faults of management, is the only way to become expert in sharpening tools. Sharpening the Tools

CHAPTER VI

CHIP CARVING

Its Savage Origin—A Clue to its only Claim to Artistic Importance—Monotony better than Variety—An Exercise in Impatience and Precision—Technical Methods.

ONE of the simplest forms of wood-carving is that known as "chip" carving. This kind of work is by no means of modern origin, as its development may be traced to a source in the barbaric instinct for decoration common to the ancient inhabitants of New Zealand and other South Sea Islands. Technically, and with modern tools, it is a form of the art which demands but little skill, save in the matter of precision and patient repetition. As practised by its savage masters, the perfection of these two qualities elevates their work to the dignity of a real art. It is difficult to "Chip" Carving

"Chip" Carving

conceive the contradictory fact, that this apparently simple form of art was once the exponent of a struggling desire for refinement on the part of fierce and warlike men, and that it should, under the influence of polite society, become the all-too-easy task of esthetically minded schoolgirls. In the hands of those warrior artists, and with the tools at their command, mostly fashioned from sharpened fish-bones and such like rude materials, it was an art which required the equivalent of many fine artistic qualities, as such are understood by more cultivated nations. The marvelous dexterity and determined purpose evinced in the laborious decoration of canoe paddles, ax-handles, and other weapons, is, under such technical disabilities as to tools, really very impressive. This being so, there is no inherent reason why such a rudimentary form of the art as "chip" carving should not be practised in a way consistent with its true nature and limitations. As its elemental distinctions are so few, and its methods so simple, it follows that in recognizing such limitations, we shall make the most of our design. Instead, then, of trusting to a forced variety, let us seek for its strong point in an opposite

direction, and by the monotonous repetition of basket-like patterns, win the not-to-be-despised praise which is due to patience and perseverance. In this way only can such a restricted form of artistic expression become in the least degree interesting. The designs usually associated with the "civilized" practise of this work are, generally speaking, of the kind known as "geometric," that is to say, composed of circles and straight lines intersecting each other in complicated pattern. Now the "variety" obtained in this manner, as contrasted with the dignified monotony of the savage's method, is the note which marks a weak desire to attain great results with little effort. The "variety," as such, is wholly mechanical, the technical difficulties, with modern tools at command, are felt at a glance to be very trifling; therefore such designs are quite unsuitable to the kind of work, if human sympathies are to be excited in a reasonable way.

An important fact in connection with this kind of design is that most of these geometric patterns are, apart from their uncomfortable "variety," based on too large a scale as to detail. All the laborious carving on paddles and clubs, such as

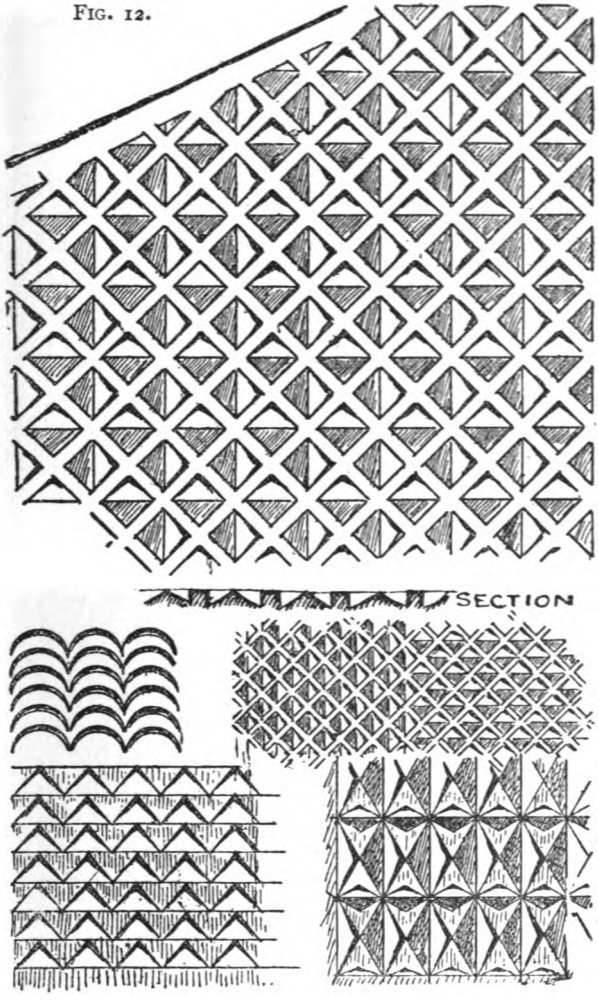
"Chip" Carving

may be seen in our museums, is founded upon a scale of detail in which the holes vary in size from $\frac{1}{16}$ to something under $\frac{1}{4}$ in. their longest way, only in special places, such as borders, etc., attaining a larger size. Such variety as the artist has permitted himself being confined to the *occasional* introduction of a circular form, but mostly obtained by a subtle change in the proportion of the holes, or by an alternate emphasis upon perpendicular or horizontal lines.

As a test of endurance, and as an experimental effort with carving tools, I set you this exercise. In Fig. 12 you will find a pattern taken from one of those South Sea carvings which we have been considering. Now, take one of the articles so often disfigured with childish and hasty efforts to cover a surface with so-called "art work," such as the side of a bellows or the surface of a bread-plate, and on it carve this pattern, repeating the same-shaped holes until you fill the entire space. By the time you have completed it you will begin to understand and appreciate one of the fundamental qualities which must go toward the making of a carver, namely, patience; and you will have pro-

FIG. 12.

"Chip" Carving



duced a thing which may give you pleasant surprises, in the unexpected but very natural admiration it elicits from your friends.

Having drawn the pattern on your wood, ruling the lines to measurement, and being careful to keep your lines thin and clear as drawn with a somewhat hard pencil, proceed to cut out the holes with the chisel, No. 11 on our list, ¼ in. wide. It will serve the purpose much better than the knife usually sold for this kind of work, and will be giving you useful practise with a very necessary carving tool. The corner of the chisel will do most of the work, sloping it to suit the different angles at the bottom of the holes. Each chip should come out with a clean cut, but to insure this the downward cuts should be done first, forming the raised diagonal lines.

When you have successfully performed this piece of discipline, you may, if you care to do more of the same kind of work, carry out a design based upon the principles we have been discussing, but introducing a very moderate amount of variety by using one or more of the patterns shown in Fig. 12, all of which are

from the same dusky artist's designs and can not be improved upon. If you wish for more variety than these narrow limits afford, then try some other kind of carving, with perhaps leafage as its motive.

"Chip" Carving

CHAPTER VII

THE GRAIN OF THE WOOD

Obstinacy of the Woody Fiber—First Exercise in Grounding — Description of Method — Cutting the Miters — Handling of Tools, Danger of Carelessness—Importance of Clean Cutting.

IT is curious to imagine what the inside of a young enthusiast's head must be like when he makes his first conscious step toward artistic expression. The chaotic jumbles of half-formed ideas, whirling about in its recesses, produce kaleidoscopic effects, which to him look like the most lovely pictures. If he could only learn to put them down! let him but acquire the technical department of his art, and what easier than to realize those most marvelous dreams. Later in his progress it begins to dawn upon him that this same technical department may not be so very obedient

The Grain of the Wood

to his wishes; it may have laws of its own, which shall change his fairy fancies into sober images, not at all unlike something which has often been done before by others. But let the young soul continue to see visions, the more the better, provided they be of the right sort. We shall in the meantime ask him to curb his imagination, and yield his faculties for the moment to the apparently simple task of realizing a leaf or two from one of the trees in his enchanted valley.

With the student's kind permission we shall, while these lessons continue, make believe that teacher and pupil are together in a class-room, or, better still, in a country workshop, with chips flying in all directions under busy hands.

I must tell you then, that the first surprise which awaits the beginner, and one which opens his eyes to a whole series of restraints upon the freedom of his operations, lies in the discovery that wood has a decided grain or fiber. He will find that it sometimes behaves in a very obstinate manner, refusing to cut straight here, chipping off there, and altogether seeming to take pleasure in thwarting his every effort. By and by he gets to know his

piece of wood; where the grain dips and where it comes up or wriggles, and with practise he becomes its master. He finds in this, his first technical difficulty, a kind of blessing in disguise, because it sets bounds to what would otherwise be an infinitely vague choice of methods.

We shall now take a piece of yellow pine, free from knots, and planed clean all round. The size may be about 12 ins. long by 7 ins. wide. We shall fix this to the bench by means of two clamps or one clamp and a screwed block at opposite corners. Now we are ready to begin work, but up to the present we have not thought of the design we intend executing, being so intent upon the tools and impatient for an attack upon the silky wood with their sharp edges.

The illustration, Fig. 13, gives a clue to the sort of design to begin with; it measures about 11 ins. long by 7 ins. wide, allowing a margin all round. The wood should be a little longer than the design, as the ends get spoiled by the clamps. This little design need not, and indeed should not, be copied. Make one for yourself entirely different, only bearing in mind the points which are to be ob-

served in arranging it, and which have for their object the avoidance of difficulties likely to be too much for a first effort. These points are somewhat to this effect: the design should be of leaves, laid out flat on a background, with no complication of perspective. They should have no undulations of surface. That is to say, the margins of all the features should be as nearly as possible the original surface of the wood, which may have just the least possible bit of finish in the manner I shall describe later on. The articulation of the leaves and flower is represented by simple gouge cuts. There should be nothing in the design requiring rounded surfaces. The passage for tools in clearing out the ground between the features must not be less than $\frac{1}{4}$ in.; this will allow the $\frac{3}{16}$ in. corner grounder to pass freely backward and forward. The ground is supposed to be sunk about three-sixteenths of an inch.

As you have not got your design made, I shall, for convenience' sake, explain how Fig. 13 should be begun and finished. First having traced the full-size design it should be transferred to the wood by means of a piece of blue carbon paper.

The Grain of the Wood

FIG. 13.

FIG. 14.

The Grain of the Wood

Then with either the Veiner or V tool outline the whole of the leaves, etc., about $\frac{1}{8}$ in. deep, keeping well on the outside of the drawing. Ignore all minor detail for the present, blocking out the design in masses. No outline need be grooved for the margin of the panel at present, as it should be done with a larger tool. For this purpose take gouge No. 6 ($\frac{1}{4}$ in. wide), and begin at the left-hand bottom corner of the panel, cut a groove about $\frac{1}{16}$ in. within the blue line, taking care not to cut off parts of the leaves in the process; begin a little above the corner at the bottom, and leave off a little below that at the top. The miters will be formed later on.

In this operation, as in all subsequent ones, the grain of the wood will be more or less in evidence. You will by degrees get to know the piece of wood you are working upon, and cut in such a way that your tool runs *with* the grain and not *against* it; that is to say, you will cut as much as possible on the up-hill direction of the fiber. This can not always be done in deep hollows, but then you will have had some practise before you attempt these.

Now take chisel No. 11, and with it

stab into the grooved outline, pressing the tool down perpendicularly to what you think feels like the depth of the ground. The mallet need not be used for this, as the wood is soft enough to allow of the tools being pressed by the hand alone, but remember that the force must be proportioned to the depth desired, and to the direction of the grain; much less pressure is wanted to drive a tool into the wood when its edge is parallel with the grain than when it lies in a cross direction; small tools penetrate more easily than large ones, as a matter of course, but one must think of these things or accidents happen.

When you have been all round the design in this way with such gouges as may be needed for the slow and quick curves, get the wood out nearly down to the ground, leaving a little for finishing. Do this with any tool that fits the spaces best; the larger the better. Cut across the grain as much as possible, not along it. The flat gouge, No. 1, will be found useful for this purpose in the larger spaces, and the grounders for the narrow passages. This leaves the ground in a rough state, which must be finished later on.

Now take gouges Nos. 2, 3, 4, 5, 6, 7, and chisels Nos. 10, 11, 12, and with them cut down the outline as accurately as possible to the depth of the ground, and, if you are lucky, just a hair's breadth deeper. In doing this make the sides slope a little outward toward the bottom. If the gouges do not entirely adapt themselves to the contours of your lines, do not trouble, but leave that bit to be done afterward with a sweep of the tool, either a flat gouge, or the corner-chisel used like a knife.

Now we have all the outline cut down to the depth of the background, and may proceed to clear out the wood hanging about between the design and the ground all round it. We shall do this with the "grounders," using the largest one when possible, and only taking to the smallest when absolutely necessary on account of space. This done, we shall now proceed to finish the hollow sides of the panel and make the miters. Again, take No. 6 gouge and drive a clear hollow touching the blue line at end of panel, and reaching the bottom of the sinking, i.e., the actual ground as finished, see *a*, Fig. 15. To form the miter at top of left-hand side of panel,

carry the hollow on until the tool reaches the bottom of the hollow running along the top; as soon as this point is gained, turn the tool out and pitch it a little up in the way shown at *c*, Fig. 15, in which

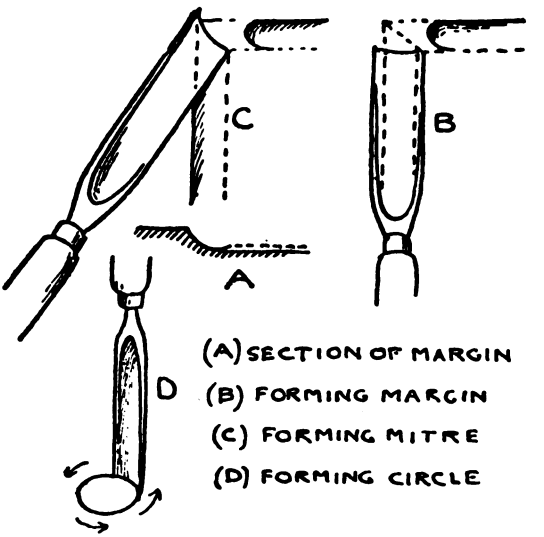


FIG. 15.

the tool is shown at an angle which brings the edge of the gouge exactly on the line of the miter to be formed. Beginning as it does at *b*, this quick turn of the handle to the left takes out the little bit of wood

shown by dotted lines at *b*, and forms one-half of the miter. The cross-grain cut should be done first, as in this way there is less risk of splintering. Now repeat the process on the long-grain side of the panel, and one miter is in a good way for being finished.

A word now about these sides of sunk panels. They always look better if they are hollowed with a gouge instead of being cut square down. In the first case they carry out the impression that the whole thing is cut out of a solid piece of wood, whereas when they are cut sharply down they always suggest cabinet-making, as if a piece had been glued on to form a margin.

We have now got the work blocked out and the ground fairly level, and we are ready to do the little carving we have allowed ourselves. Before we begin this I shall take the opportunity of reminding you that you must be very careful in handling your tools; it is a matter of the greatest importance, if the contingency of cut fingers or damaged work is to be avoided. The left hand in carving has nearly as much to do as the right, only in a different way. Grasp the chisel or gouge

in the left hand with the fingers somewhat extended, that is, the little finger will come well on to the blade, and the thumb run up toward the top of the handle; the wrist meanwhile resting on the work. The right hand is used for pushing the tool forward, and for turning it this way and that, in fact does most of the guiding. Both hands may be described as opposing each other in force, for the pressure on the tool from the right hand should be resisted by the left, until almost a balance is struck, and just enough force left to cut the wood gently, without danger of slipping forward and damaging it or the fingers. The tool is thus in complete command, and the slightest change of pressure on either hand may alter its direction or stop it altogether. Never drive a tool forward with one hand without this counter-resistance, as there is no knowing what may happen if it slips. Never wave tools about in the hand, and generally remember that they are dangerous implements, both to the user and the work. Never put too much force on a tool when in the neighborhood of a delicate passage, but take time and eat the bit of wood out mouse-like, in small fragments.

The Grain of the Wood

Now we are ready to finish our panel. Take the grounders, according to the size required, always using the biggest possible. Keep the tool well pressed down, and *shave* away the roughness of the ground, giving the tool a slight sideway motion as well as a forward one. Work right up to the leaves, etc., which, if cut deep enough, should allow the chips to come away freely, leaving a clear line of intersection; if it does not, then the upright sides must be cut down until the ground is quite clear of chips. Grounder tools are very prone to dig into the surface and make work for themselves: sharp tools, practise, and a slight sideway motion will prevent this. Tool No. 23 is useful in this respect, its corners being slightly lifted above the level of the ground as it passes along. Corners that can not be reached with the bent chisels may be finished off with the corner-chisel.

Now we come to the surface decorations, for the carving in this design consists of little more. This is all done with the gouges. Generally speaking, enter the groove at its widest end and leave it at the narrowest, lowering the handle of the tool gradually as you go along to lift the

gouge out of the wood, producing the drawing of the forms at the same time. A gouge cut never looks so well as when done at one stroke; patching it afterward with amendments always produces a labored look. If this has to be done, the tool should be passed finally over the whole groove to remove the superfluous tool marks—a sideway gliding motion of the edge, combined with its forward motion, often succeeds in this operation. To form the circular center of the flower, press down gouge Nos. 5 or 6, gently at first and perpendicular to the wood. When a cut has been made all round the circle, work the edge of the tool in it, circus-like, by turning the handle in the fingers round and round until the edge cuts its way down to the proper depth. (See A, Fig. 15.)

Carve the sides of the leaves where necessary with flat gouges on the inside curves, and with chisels and corner-chisels on the outside ones. These should be used in a sliding or knife-like fashion, and not merely pushed forward. Finish the surface in the same manner all over between the gouge grooves and the edges of the leaves, producing a very slight

The Grain of the Wood

bevel as in section *a*, Fig. 13, and this panel may be called finished.

Fig. 14 is another suggestion for a design, upon which I hope you will base one of your own as an exercise at this stage of your progress.

Before we begin another, though, I shall take this opportunity of reading you a short lecture on a most important matter which has a great deal to do with the preparation of your mind in making a suitable choice of subject for your future work.

CHAPTER VIII

IMITATION OF NATURAL FORMS

Difficulties of Selection and Arrangement—Limits of an Imitative Treatment — Light and Distance Factors in the Arrangement of a Design — Economy of Detail Necessary — The Word "Conventional."

Imitation of Natural Forms

BROADLY stated, the three most formidable difficulties which confront the beginner when he sets out to make what he is pleased to call his design for carving in relief, are: Firstly, the choice of a subject; secondly, how far he may go in the imitation of its details; thirdly, its

arrangement as a whole when he has decided the first two points.

Imitation of Natural Forms

Just now we shall deal only with the second difficulty, that is, how far may likeness to nature be carried. We shall do this, because until we come to some understanding on that point, a right choice of subject becomes practically impossible, consequently the consideration of its arrangement would be premature.

There is, strictly speaking, only one aim worthy of the artist's attention, be he carver or painter; and that is the representation of some form of life, or its associations. Luckily, there is a mighty consensus of opinion in support of this dictum, both by example and precept, so there is no need to discuss it, or question its authority. We shall proceed, therefore, to act upon it, and choose for our work only such material as in some way indicates life, either directly, as in trees, animals, or figures, or by association, and as explanation thereof, as in drapery and other accessories—never choosing a subject like those known to painters as " still life," such as bowls, fiddles, weapons, etc., unless, as I have said, they are associated with the more important element.

Imitation of Natural Forms

You have already discovered by practise that wood has a grain which sets bounds to the possibilities of technique. You have yet to learn that it has also an inordinate capacity for swallowing light. Now, as it is by the aid of light that we see the results of our labor, it follows that we should do everything in our power to take full advantage of that helpful agency. It is obvious that work which can not be seen is only so much labor thrown away. There is approximately a right relative distance from which to view all manner of carvings, and if from this position the work is not both distinct and coherent, its result is valueless.

Then what is the quality which makes all the difference between a telling piece of carving, and one which looks, at a moderate distance, like crumpled paper or the cork bark which decorates a suburban summer-house? The answer is, attention to *strict economy in detail.* Without economy there can be no arrangement, and without the latter no general effect. We are practically dealing, not with so much mere wood, but unconsciously we are directing our efforts to a manipulation of the light of day—playing with the

lamps of the sky—and if we do not understand this, the result must be undoubtedly failure, with a piece of wood left on our hands, cut into unintelligible ruts.

Imitation of Natural Forms

But what, you will say, has all this to do with copying the infinite variety of nature's detail; surely it can not be wrong to imitate what is really beautiful in itself? You will find the best answer to this in the technical difficulties of your task. You have the grain of the wood to think of, and now you have this other difficulty in managing the light which is to display your design. The obstinacy of the wood may be to some extent conquered, and indeed has been almost entirely so, by the technical resources of Grinling Gibbons, but the treatment demanded by the laws of light and vision is quite another question, and if our work is to have its due effect, there is no other solution of the problem than by finding a way of complying with those laws.

If I want to represent a rose and make it intelligible at a glance from such and such a point of view, and I find after taking infinite pains to reproduce as many as I can of its numerous petals, and as

Imitation of Natural Forms

much as possible of its complicated foliage, that I had not reckoned with the light which was to illuminate it, and that instead of displaying my work to advantage, it has blurred all its delicate forms into dusky and chaotic masses, would I not be foolish if I repeated such an experiment? Rather, I take the opposite extreme, and produce a rose this time which has but five petals, and one or two sprays of rudimentary foliage. Somehow the result is better, and it has only taken me a tenth part of the time to produce. I now find that I can afford, without offending the genius of light, or straining my eyesight, to add a few more petals and one or two extra leaves between those I have so sparingly designed, and a kind of balance is struck. The same thing happens when I try to represent a whole tree—I can not even count the leaves upon it, why then attempt to carve them? Let me make one leaf that will stand for fifty, and let that leaf be simplified until it is little more than an abstract of the form I see in such thousandfold variety. The proof that I am right this time is that when I stand at the proper distance to view my work, it is all as distinct as I could wish it to be. Not a leaf-

point is quite lost to sight, except where, in vanishing into a shadow, it adds mystery without creating confusion.

Imitation of Natural Forms

We have in this discovery a clue to the meaning of the word "Conventional": it means that a particular method has been "agreed upon" as the best fitted for its purpose, i.e., as showing the work to most advantage with a minimum of labor. Not that experience had really anything to do with the invention of the method. Strange to say, the earliest efforts in carving were based upon an unquestioning sense that no other was possible, certainly no attempts were made to change it until in latter days temptations arose in various directions, the effects of which have entailed upon ourselves a conscious effort of choice in comparing the results of the many subsequent experiments.

Before I continue this subject further, I shall give you another exercise, with the object of making a closer resemblance to natural forms, bearing in mind the while all that has been said about a sparing use of minute detail with reference to its visible effect. We shall in this design attempt some shaping on the surface of the leaves and a little rounding too, which

Imitation of Natural Forms

may add interest to the work. In my next lecture to you, I shall have something to say about another important element in all designs for wood-carving. I mean the shapes taken by the background between the leaves, like the patches of sky seen behind a tree.

CHAPTER IX

ROUNDED FORMS

Necessity for Every Carver Making his own Designs—Method of Carving Rounded Forms on a Sunk Ground.

Rounded Forms

FIG. 16, our second exercise, like the first one, is only to be taken as a suggestion for a design to be made by yourself. It is a fundamental principle that both design and execution should be the work of one and the same person, and I want you to begin by strictly practising this rule. It was indeed one of the main conditions of production in the best times of the past, and there is not a shadow of doubt that it must again come to be the universal rule if any real progress is to be made in the art of wood-carving, or in any other art for that

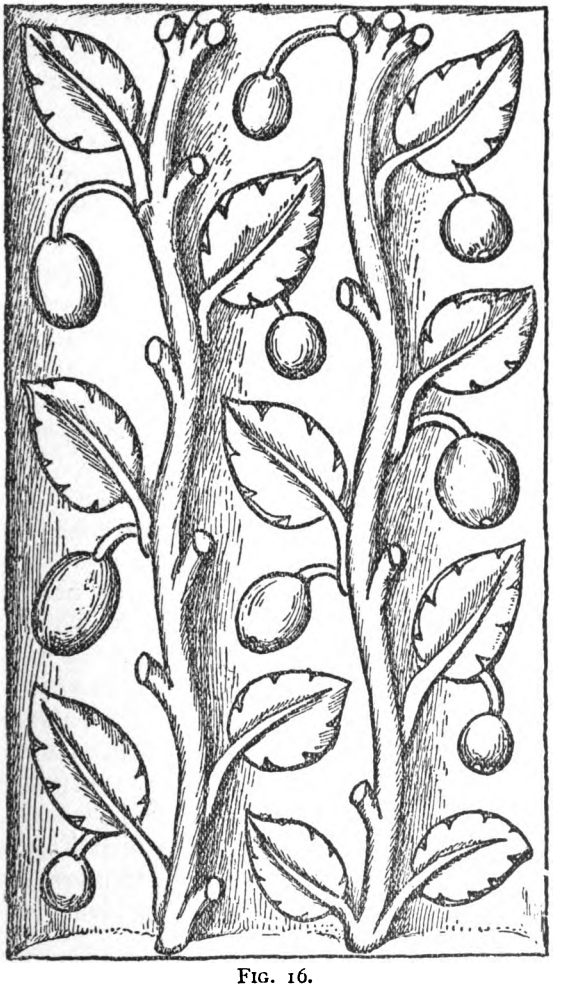


FIG. 16.

matter. Just think for a moment how false must be the position of both parties, when one makes a "design" and another carries it out. The "designer" sets his head to work (we must not count his hands at present, as they only note down the results in a kind of writing), a "design" is produced and handed over to the carver to execute. He, the carver, sets his hands and eyes to work, to carry out the other man's idea, or at least interpret his notes for the same, his head meanwhile having very little to do, further than transfer the said notes to his hands. For very good reasons such an arrangement as this is bound to come to grief. One is, that no piece of carving can properly be said to be "designed" until it is finished to the last stroke. A drawing is only a map of its general outline, with perhaps contours approximately indicated by shading. In any case, even if a full-size model were supplied by the designer, the principle involved would suffer just the same degree of violence, for it is in the actual carving of the wood that the designer should find both his inspiration and the discipline which keeps it within reasonable bounds. He must be at full liberty to alter his original in-

tention as the work develops under his hand.

Rounded Forms

Apparently I have been led into giving you another lecture; we must now get to work on our exercise.

Draw and trace your outline in the same manner as before, and transfer it to the wood. You may make it any convenient size, say on a board 18 ins. long by 9 ins. wide, or what other shape you like, provided you observe one or two conditions which I am going to point out. It shall have a fair amount of background between the features, and the design, whatever it is, shall form a traceable likeness to a pattern of some description; it shall have a rudimentary resemblance to nature, without going into much detail; and last, it shall have a few *rounded* forms in it, rounded both in outline and on the surface, as, for instance, plums.

In setting to work to carve this exercise, follow the same procedure as in the first one, up to the point when the surface decorations began. In the illustration, there is a suggestion for a variety in the background which does not occur in the other. In this case the little branches are supposed to lie along the tops of gentle

Rounded Forms

elevations, and the plums to lie in the hollows. It produces a section something like this, Fig. 17. There is a sufficient

FIG. 17.

excuse for this kind of treatment in the fact that the branches do not require much depth, and the plums will look all the better for a little more. The depth of the background will thus vary, say between $\frac{3}{16}$ in. at the branches and $\frac{3}{8}$ in. at the plums. The branches are supposed to be perfectly level from end to end, that is, they lie parallel to the surface of the wood, but of course curve about in the other direction. The leaves, on the other hand, are supposed to be somewhat rounded and falling away toward their sides and points in places. The vein in the center of the leaves may be done with a parting tool, as well as the serrations at the edge, or the latter may perhaps be more surely nicked out with a chisel, after the leaves have received their shapes, the leaves being made to appear as if one side was higher than the other, and as though

their points, in some cases, touched the background, while in others the base may be the lowest part. The twigs coming out from the branches to support the plums should be somewhat like this in section, and should lie along the curve of the background, and be in themselves rounded, as in Fig. 18, see section *a a*. The bottom of the panel shows a bevel instead of a hollow border: this will serve to distinguish it as a starting-point for

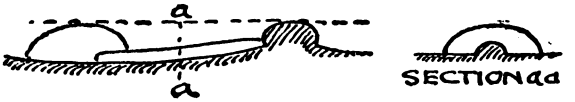


FIG. 18.

the little branches which appear to emerge from it like trees out of the ground. The plums should be carved by first cutting them down in outline to the background, as A, Fig. 19. Then the wood should be removed from the edge all round, to form the rounded surface. To do this, first take the large gouge, No. 2, and with its hollow side to the wood, cut off the top, from about its middle to one end, and reversing the process do the same with the other side. Then it will appear some-

Rounded Forms

thing like B (Fig. 19). The remainder must be shaped with any tool which will do it best. There is no royal road to the production of these rounded forms, but

FIG. 19.

probably gouge No. 1 will do the most of it.

Here it may be observed that the fewer tools used the better, as if many are used there is always a risk of unpleasant facets at the places where the various marks join each other. Before you try the plums, or apples, or other rounded fruit which you may have in your design, it would be as well to experiment with one on a piece of spare wood in order to decide upon the most suitable tools. The stems or branches may be done with flat gouge No. 1, or the flat or corner chisel. A very delicate twist or spiral tendency in their upward growth will greatly improve their appearance, a mere faceting produced by a flat gouge or

chisel will do this; anything is better than a mere round and bare surface, which has a tendency to look doughy. The little circular mark on the end of the plum (call it a plum, although that fruit has no such thing) is done by pressing gouge No. 7 into the wood first, with the handle rather near the surface of the wood, and afterward at a higher inclination, this taking out a tiny chip of a circular shape and leaving a V-shaped groove.

Rounded Forms

Now I am going to continue the subject of my last lecture, in order to impress upon you the importance of suiting your subject to the conditions demanded by the laws of technique and light. Practise with the tools must go hand in hand with the education of the head if good results are to be expected; nor must it be left wholly to hand and eye if you are to avoid the pitfalls which lie in wait for the unwary mechanic.

CHAPTER X

THE PATTERNED BACKGROUND

Importance of Formal Pattern as an Aid to Visibility —Pattern and Free Rendering Compared—First Impressions Lasting—Medieval Choice of Natural Forms Governed by a Question of Pattern.

The Patterned Background

By a comparison of the piece of Byzantine sculpture, Fig. 20, with the more elaborate treatment of foliage shown in Fig. 21, from late Gothic capitals, in Southwell Minster, it will be seen how an increasing desire for imitative resemblance has taken the place of a patterned foundation, and how, in consequence, the background is no longer discernible as a contrasting form. The Byzantine design is, of course, little more than a pattern with sunk holes for a background, and it is in marble; but those holes are arranged in a distinct and orderly fashion. The other is a highly realistic treatment of foliage, the likeness to nature being so fully developed that some of these groups have veins on the *backs* of the leaves. The question for the moment is this, which of the two extremes gives the

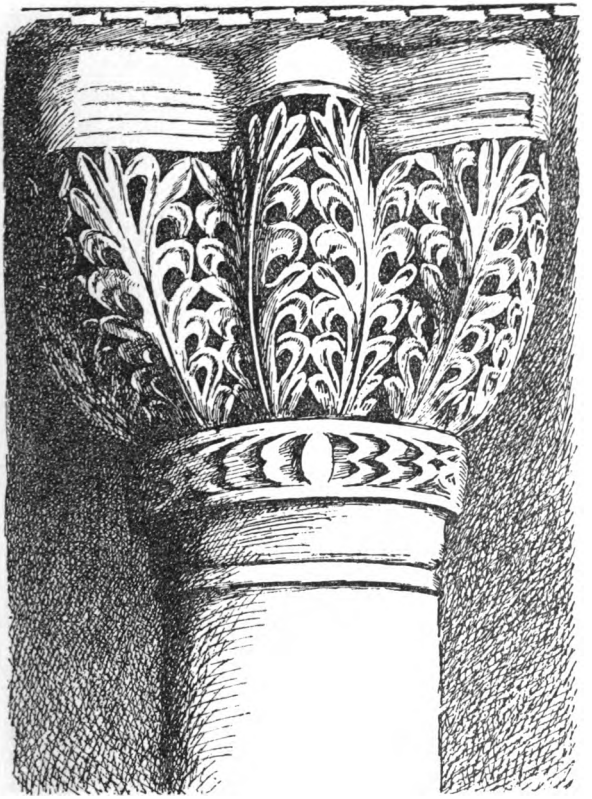


FIG. 20.

clearest account of itself at a distance? I think there can be little doubt that the more formal arrangement bears this test better than the other, and this, too, in face of the fact that it has cost much less labor to produce. Remember we are only now considering the question of *visibility* in the design. You may like the undefined and suggestive masses into which the leaves and shadows of the Southwell one group themselves better than the unbending severity of the lines in the other, but that is not the point at present. You can not *see* the actual work which produces that mystery, and I may point out to you, that what is here romantic and pleasing on account of its changeful and informal shadows, is on the verge of becoming mere bewildering confusion; a tendency which always accompanies attempts to imitate the accidental or informal grouping of leaves, so common to their natural state. The further this is carried, the less is it possible to govern the forms of the background pattern; they become less discernible as contrasting *forms,* although they may be very interesting as elements of mystery and suggestive of things not actually seen. The consequence is a

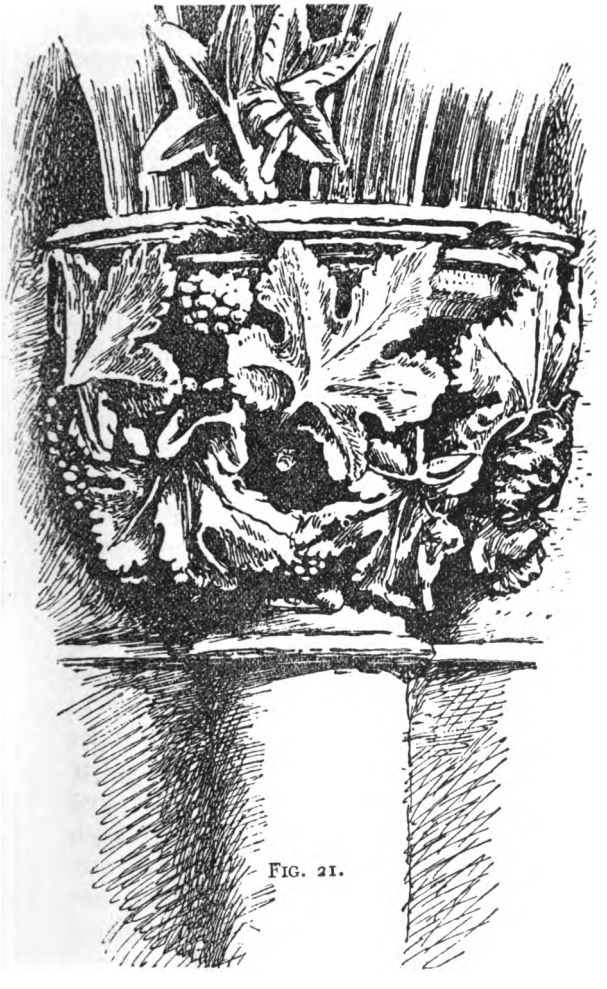


FIG. 21.

The Patterned Background

loss of power in producing that instantaneous impression of harmony which is one of the secrets of effectiveness in carving. This is greatly owing to the constant change of plane demanded by an imitative treatment, as well as the want of formality in its background. The lack of restful monotony in this respect creates confusion in the lights, making a closer inspection necessary in order to discern the beauty of the work. Now the human imagination loves surprises, and never wholly forgives the artist who, failing to administer a pleasant shock, invites it to come forward and examine the details of his work in order to see how well they are executed.

These examples, you will say, are from architectural details which have nothing to do with wood-carving. On the contrary, the same laws govern all manner of sculpturesque composition—scale or material making no difference whatever. A sculptured marble frieze or a carved ivory snuff-box may be equally censurable as being either so bare that they verge on baldness and want of interest, or so elaborate that they look like layers of fungus.

Do not imagine that I am urging any preference for a Byzantine treatment in

your work; to do so would be as foolish as to ask you to don medieval costume while at work, or assume the speech and manners of the tenth century. It would be just as ridiculous on your part to affect a bias which was not natural to you. I am, however, strongly convinced that in the choice of natural forms and their arrangement into orderly masses (more particularly with regard to their appearance in silhouette against the ground), and also in the matter of an economical use of detail, we have much to learn from the carvers who preceded the fourteenth century. They thoroughly understood and appreciated the value of the light which fell upon their work, and in designing it arranged every detail with the object of reflecting as much of it as possible. To this end, their work was always calculated for its best effects to be seen at a fairly distant point of view; and to make sure that it would be both visible and coherent, seen from that point, they insisted upon some easily understood pattern which gave the key to the whole at a glance. To make a pattern of this kind is not such an easy matter as it looks. The forms of the background spaces are the complementary parts of the

design, and are just as important as those of the solid portions; it takes them both to make a good design.

Now I believe you must have had enough of this subject for the present, more especially as you have not yet begun to feel the extraordinary difficulty of making up your mind as to what is and what is not fit for the carver's uses among the boundless examples of beauty spread out for our choice by Dame Nature.

Meantime, I do not want you to run away with the impression that when you have mastered the principles of economy in detail and an orderly disposition of background, that you have therefore learned all that is necessary in order to go on turning out design after design with the ease of a cook making pancakes according to a recipe. You will find by experience, I think, that all such principles are good for is to enforce clearness of utterance, so to speak, and to remind you that it is light you are dealing with, and upon which you must depend for all effects; also that the power of vision is limited. Acting upon them is quite another matter, and one, I am afraid, in

which no one can help you much. You may be counseled as to the best and most practical mode of expressing your ideas, but those thoughts and inventions must come from yourself if they are to be worth having.

The Patterned Background

In my next lecture I shall have something to say with regard to originality of design, but now we must take up our tools again and begin work upon another exercise.

CHAPTER XI

CONTOURS OF SURFACE

Adaptation of Old Designs to Modern Purposes—"Throwing About"—Critical Inspection of Work from a Distance as it Proceeds.

HERE are two fragments of a kind of running ornament. Fig. 22 is a part of the jamb molding of a church in Vicenza. If you observe carefully, you will find that it has a decidedly classical appearance. The truth is that it was carved by a Gothic artist late in the fourteenth century, just after the Renaissance influence began to make itself felt. It is an adaptation by him

Contours of Surface

Contours of Surface

FIG. 22.

of what he remembered having seen in his travels of the new style, grafted upon the traditional treatment ready to his hand. It suits our purpose all the better on that account, for the reason that we are going to re-adapt his design into an exercise, and shall attempt to make it suitable to our limited ability in handling the tools, to the change in ma-

terial from stone to wood, and lastly, to our different aims and motives in the treatment of architectural ornament. Please do all this for yourself in another design, and look upon this suggestion merely in the light of helping a lame dog over a stile.

In this exercise (Fig. 23) you will repeat all you have already done with the others,

Fig. 23.

Contours of Surface

until you come to the shaping of the leaves, in which an undulating or up and down motion has been attempted. This involves a kind of double drawing in the curves, one for the flat and one for the projections; so that they may appear to glide evenly from one point to the other, sweeping up and down, right and left, without losing their true contours. Carvers call this process "throwing about," i.e., making the leaves, etc., appear to rise from the background and again fall toward it in all directions. The phrase is a very meager one, and but poorly expresses the necessity for intimate sympathy between each surface so "thrown about." It is precisely in the observance of this last quality that effects of richness are produced. You can hardly have too much monotony of surface, but may easily err by having too much variety. Therefore, whatever system of light and shade you may adopt, be careful to repeat its motive in some sort of rhythmic order all over your work; by no other means can you make it rich and effective at a distance.

It is well every now and then to put your work up on a shelf or ledge at a distance and view it as a whole; you will

thus see which parts tell and which do not, and so gain experience on this point. Work should also be turned about frequently, sidewise and upside down, in order to find how the light affects it in different directions. Of course, you must not think that because your work may happen to look well when seen from a little way off that it does not matter about the details, whether they be well or poorly carved. On the contrary, unless you satisfy the eye at both points of view, your work is a partial failure. The one thing is as important as the other, only, as the first glance at carved work is generally taken at some little distance, it is the more immediately necessary to think of that, before we begin to work for a closer inspection. First impressions are generally lasting with regard to carved work, and, as I have said before, beauty of detail seldom quite atones for failure in the arrangement of masses.

Contours of Surface

The rounded forms in this design may give you a little trouble, but practise, and that alone, will enable you to overcome this. Absolute smoothness is not desirable. Glass-papered surfaces are extremely ugly, because they obtrude themselves on

Contours of Surface

account of their extreme smoothness, having lost all signs of handiwork in the tool marks. We shall have something to say presently about these tool marks in finishing, as it is a very important subject which may make all the difference between success or failure in finishing a piece of work.

CHAPTER XII

ORIGINALITY

Dangers of Imposing Words—Novelty more Common than Originality—An Unwholesome Kind of "Originality."

Originality

I TOLD you that I should have something to say about originality. Almost every beginner has some vague impression that his first duty should be to aim at originality. He hears eulogiums passed upon the individuality of some one or other, and tries hard to invent new forms of expression or peculiarities of style, only resulting, in most cases, in new forms of ugliness, which it seems is the only possibility under such conscious efforts after novelty. The fact is that it takes many generations of ardent minds to accomplish what at first each

thinks himself capable of doing alone. Originality
True originality has somewhat the quality of good wine, which becomes more delightful as time mellows its flavor and imparts to it the aroma which comes of long repose; like the new wine, too, originality should shyly hide itself in dark places until maturity warrants its appearance in the light of day. That kind of originality which is strikingly new does not always stand the test of time, and should be regarded with cautious skepticism until it has proved itself to be more than the passing fashion or novelty of a season. There is a kind of sham art very conspicuous at the present time, which was at quite a recent date popularly believed to be very original. It seems to have arisen out of some such impatient craving for novelty, and it has been encouraged by an easy-going kind of suburban *refinement,* which neither knows nor cares very much what really goes to the making of a work of art. This new art has filled our shops and exhibitions with an invertebrate kind of ornament, which certainly has the doubtful merit of "never having been seen before." It has evidently taken its inspiration from the trailing and supine forms

Originality

of floating seaweed, and revels in the expression of such boneless structure. By way of variety it presents us with a kind of symbolic tree, remarkable for more than archaic flatness and rigidity. Now, this kind of "originality" is not only absolutely valueless, but exceedingly harmful; its only merit is that, like its ideal seaweed, it has no backbone of its own, and we may hope that it will soon betake itself to its natural home, the slimy bottom of the ocean of oblivion.

Meantime, the only thing we are absolutely sure of in connection with that much-abused word "originality" is this, that no gift, original or otherwise, can be developed without steady and continuous practise with the tools of your craft.

CHAPTER XIII

PIERCED PATTERNS

Exercise in Background Pattern—Care as to Stability—Drilling and Sawing out the Spaces—Some Uses for Pierced Patterns.

Pierced Patterns

THE present exercises may be described as a kind of carved open fretwork—that is to

say, the ground is entirely cut away, leaving the pattern standing free. This will form an excellent piece of discipline with regard to the design of background forms, because in such work as this, those forms assert themselves in a very marked manner; if they are in any way found to be con-

FIG. 24.

spicuously unequal in size or are awkwardly designed as to shape, the whole effect of the work is spoiled.

For your first effort make a design based upon No. 24, and please to observe these rules in its construction. The main or leading lines of the pattern are to run as much as possible without crossing each other. The holes are to be fairly equal in

size, or rather in area, as they need not be at all like each other in shape. The amount of wood left standing to be of a width averaging never less than half the length of the average-sized hole. This is necessary for securing sufficient strength of material in the cross-grained pieces, which would be liable to split if made too long

FIG. 25.

and narrow. The pattern should be formal in character, not necessarily symmetrical, but it should be well balanced. You may have one part of your design composed of large holes and another of small ones, provided the change is part of a definite design, as in Fig. 25. You may even leave the wood in some parts forming a solid background, or you may treat

it as a separate piece of simple carving on the solid, as in Fig. 26, being careful to execute it in a consistently simple manner, as in this kind of work much change of manner in execution is inadvisable, although, at the same time, it is open to

FIG. 26. Half.

any amount of variety in design of outline and combination of contrasts.

Take a piece of pine about 3 or 4 ft. long and 7 or 9 ins. wide by ¾ in. thick. Trace on your pattern and drill circular holes in the middle of each space to be cut through. Then take a keyhole saw, and remove the wood by sawing round the space close to the blue line, taking care not to cut through it in any place. The saw must be held very truly

upright in order to cut the sides of the spaces at right angles to the face of the wood. Now carve the pattern on the surface in whatever manner you have designed —in grooves suggesting the articulation of the leaves, in short grooves which may pass for additional leaves, or in a dozen ways which practise may help you to invent.

The wood should be held tightly down to the bench in all its parts, or, at least, in those being operated upon, as it may, if unsupported, crack across some of the narrow parts. The sides of all the holes must be carved out clean to remove the rough saw marks. This can be done partly by gouges, or still better, the wood may be held up on its edge and the holes cut round with a sharp penknife where the grain allows it. Now turn the work over on its face and carve bevels round each of the holes. This reduces the apparent thickness of wood, and adds to the effect of delicacy in the pattern.

This work may be used for the cresting of some large piece of furniture, or may be adapted to fill screens or partitions, stair newels, and balusters, or it may be used as a cornice decoration in the manner

suggested by No. 26, where the pierced work can be backed by a hollow cornice which it fills and enriches. Pierced Patterns

In our next exercise we shall try our hands upon a piece of hardwood for a change—meantime do one or two of these fret patterns by way of disciplinary exercise in outline forms.

CHAPTER XIV

HARDWOOD CARVING

Carvings can not be Independent Ornaments—Carving Impossible on Commercial Productions — The Amateur Joiner—Corner Cupboards—Introduction of Foliage Definite in Form, and Simple in Character—Methods of Carving Grapes.

WE now come to the question, what are we going to do with all the pieces of carving which we propose to undertake. Hardwood Carving

There is no more inexorable law relating to the use of wood-carving than the one which insists upon some kind of passport for its introduction, wherever it appears. It must come in good company, and be properly introduced. The slightest and most distant connection with a recog-

nized sponsor is often sufficient, but it will not be received alone. We do not make carvings to hang on a wall and be admired altogether on their own account. They must decorate some object. A church screen, a font, a piece of furniture, or even the handle of a knife. It is not always an easy matter to find suitable objects upon which to exercise our wood-carving talents. Our furniture is all made now in a wholesale manner which permits of no interference with its construction, while at the same time, if we wish to put any carving upon it, it is absolutely essential that both construction and decoration should be considered together.

A very modest beginning may be made in adapting ornament to a useful article, by carving the surface of a bread plate. These are usually made of some hard wood, such as sycamore. They may be made of oak, but sycamore has the advantage in its lighter color, which is more likely to be kept clean. Two suggestions are given in Figs. 27 and 28 for carving appropriate to this purpose. The essentials are, that there should be a well-defined *pattern* simple in construction, and as effective as possible with little labor;

that there should be little or no rounding of surface, the design consisting of gouge cuts and incisions arranged to express the pattern. The incisions may form a regular

FIG. 27.

sunk ground, but it should not be deep, or it will not be easily kept clean. Then, as in cutting bread the knife comes in contact with the surface, no delicate work is advisable; a large treatment with broad surfaces, and some plain spaces left to

protect the carved work, is likely to prove satisfactory in every way. A piece of sycamore should be procured, ready for carving; this may be got from a wood-turner, but it will be as well to give him

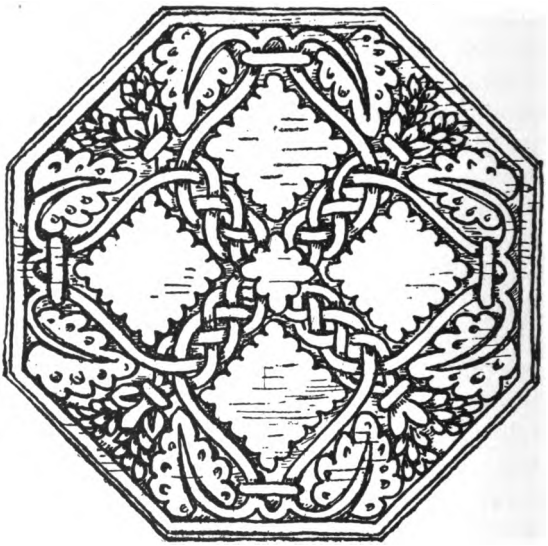


FIG. 28.

a drawing, on which is shown the section of edge and the position of all turned lines required for confining the carving. If the plate is to be of any shape other than circular, then it must be neatly

made by a joiner, unless you can shape it yourself.

Many of you are, I have no doubt, handy joiners, and may with a little help put together some slight pieces of furniture to serve at least as an excuse for the introduction of your carving. Here are some suggestions for corner cupboards, chosen as giving the largest area for carved surface with the minimum of expense in construction. The material should be oak—English if possible, or it may be Italian walnut. The doors of Figs. 40 and 41 are in three narrow boards with shallow beads at the joints, those of the others are each made of a single board, and should be ½ in. to ⅝ in. thick, the doors may be about 2 ft. 6 ins. high, each having two ledges about 3 ins. wide, screwed on behind top and bottom to keep them from twisting. All moldings, beads, etc., are to be carved by hand, no planes being used. Having traced the lines of your design upon the board, you may begin, if there are moldings as in Fig. 32, by using a joiner's marking gage to groove out the deepest parts of the parallel lines in the moldings along the edges, doing the same to the curved ones

with a V tool or Veiner. Then form the moldings with your chisels or gouges. Keep them very flat in section as in Fig. 29.

FIG. 29.

The fret patterns on Figs. 32, 35, and 36, where not pierced, should also be done in low relief, not more than $\frac{1}{8}$ in. deep, and the sides of the bands beveled as in section *a*, Fig. 30. The widths of these bands ought not to be less than $\frac{1}{2}$ in., and look better if they are wider. Very narrow bands have a better appearance, if, instead of being cut straight down, they are hollowed at sides like *b* in Fig. 30.

FIG. 30.

Fig. 31 is a detail of a kind of gouge work which you must all know very well. One perpendicular cut of a gouge driven in with the mallet, and one side cut, should form one of these crescent or thimble-shaped holes. They should not be too deep in proportion to their size. Their

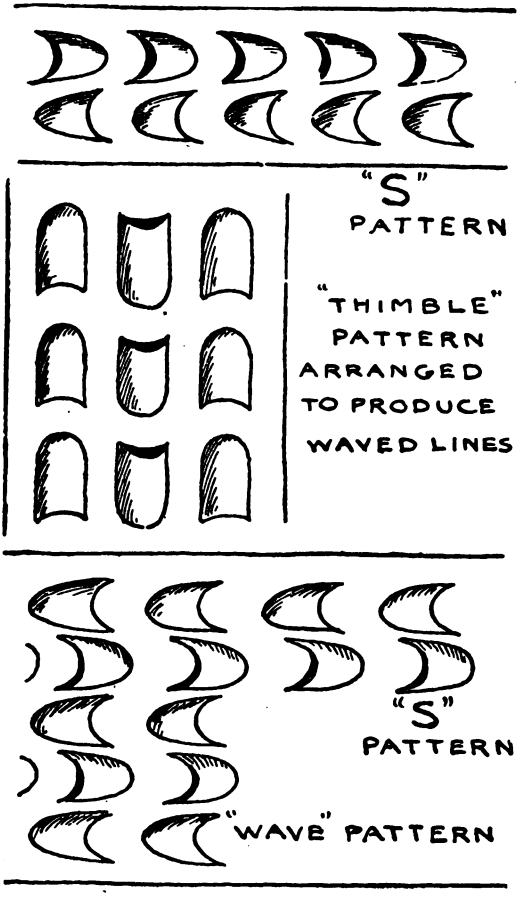

"S"
PATTERN
"THIMBLE"
PATTERN
ARRANGED
TO PRODUCE
WAVED LINES
"S"
PATTERN
"WAVE" PATTERN

FIG. 31.

combinations may be varied to a great extent. Two or three common ones are shown in the illustration. This form of ornament was in all likelihood invented by some ingenious carpenter with a turn for art and a limited stock of carving tools. His humble contribution to the resources of the carver's art has received its due share of the flattery which is implied by imitation. In all these patterns it is well to remember that the flat surface of the board left between the cuts is really the important thing to consider, as all variety is obtained by disposing the holes in such a way as to produce the pattern required by means of their outlines on the plain surface. Thus waved lines are produced as in Fig. 31, and little niches like mimic architecture as in Fig. 34, by the addition of the triangular-shaped holes at the top, and the splayed sills at the bottom. (It is obvious that an arrangement like the latter should never be turned upside down.) If this attention to the surface pattern is neglected the holes are apt to become mere confused and meaningless spots.

In small pieces of furniture like these, which are made of comparatively thin

wood, the carving need not have much depth, say the ground is sunk ¼ in. at the deepest. As oak is more tenacious than pine, you will find greater freedom in working it, although it is so much harder to cut. You may find it necessary to use the mallet for the greater part of the blocking out, but it need not be much used in finishing. A series of short strokes driven by gentle taps of the mallet will often make a better curve than if the same is attempted without its aid.

It will be well now to procure the remainder of the set of twenty-four tools if you have not already got them, as they will be required for the foliage we are about to attempt. The deep gouges are especially useful: having two different sweeps on each tool, they adapt themselves to hollows which change in section as they advance.

Fig. 32 contains very little foliage, such as there is being disposed in small diamond-shaped spaces, sunk in the face of the doors, and a small piece on the bracket below. All this work should be of a very simple character, definite in form and broad in treatment.

Fig. 33 is more elaborate, but on much

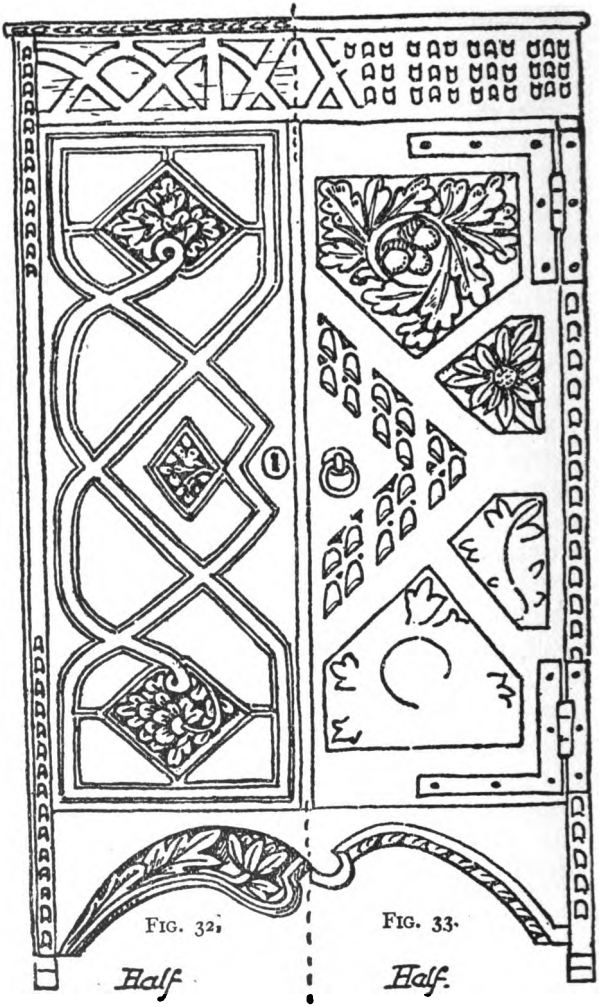


FIG. 32.

Half

FIG. 33.

Half.

the same lines of design varied by having a larger space filled with groups of leaves. Fig. 34 gives the carving to a larger scale; in it the oak-leaves are shown with raised veins in the center, the others being merely indicated by the gouge hollows. There is some attempt in this at a more natural mode of treating the foliage. While such work is being carved, it is well to look now and then at the natural forms themselves (oak and laurel in this case) in order to note their characteristic features, and as a wholesome check on the dangers of mannerism.

It is a general axiom founded upon the evidence of past work, and a respect for the laws of construction in the carpenter's department, that when foliage appears in panels divided by plain spaces, it should never be made to look as if it grew *from one panel into the other*, with the suggestion of boughs passing behind the solid parts. This is a characteristic of Japanese work, and may, perhaps, be admirable when used in delicate painted decorations on a screen or other light furniture, but in carvings it disturbs the effect of solidity in the material, and serves no purpose which can not be attained in a much better way.

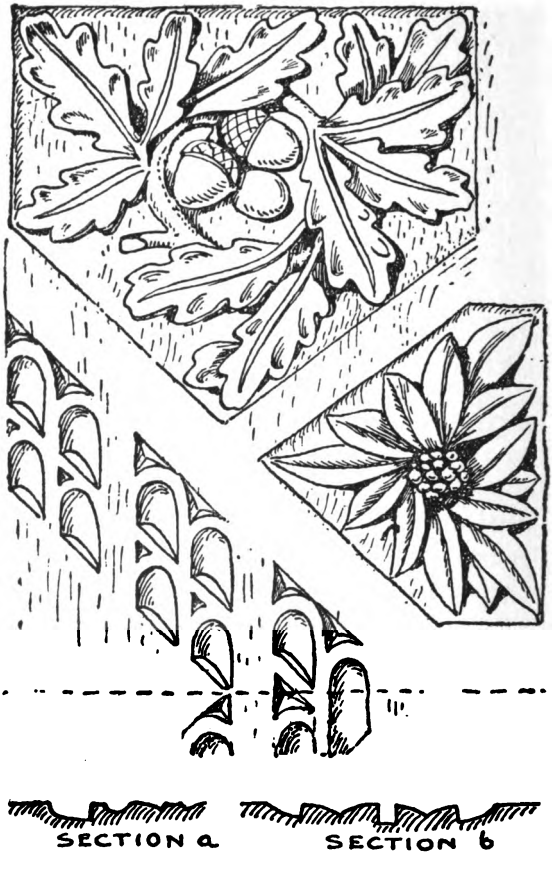


FIG. 34.

Expedients have been invented to overcome the difficulty of making a fresh start in each panel, one of which is shown in Fig. 34, where the beginning of the bough is hidden under a leaf. It is presumable that the bough *may* go on behind the uncarved portions of the board to reappear in another place, but we need not insist upon the fancy, which loses all its power when attention is called to it, like riddles when the answer is known.

In Fig. 35, like the last, the treatment is somewhat realistic. This is shown to a larger scale in Fig. 38. Nevertheless, it has all been "arranged" to fit its allotted space, and all accidental elements eliminated; such, for instance, as leaves disappearing in violent perspective, or even turned sidewise, and all minute details which would not be likely to show conspicuously if carved in wood. In Fig. 39, (*a*) is an outline of a group of vine-leaves taken from nature, as it appeared, and in which state it is quite unfitted for carving, on account of its complicated perspective and want of definite outline; Fig. 39 (*b*) is a detail also copied from nature, but which might stand without alteration provided it formed part of a work delicate

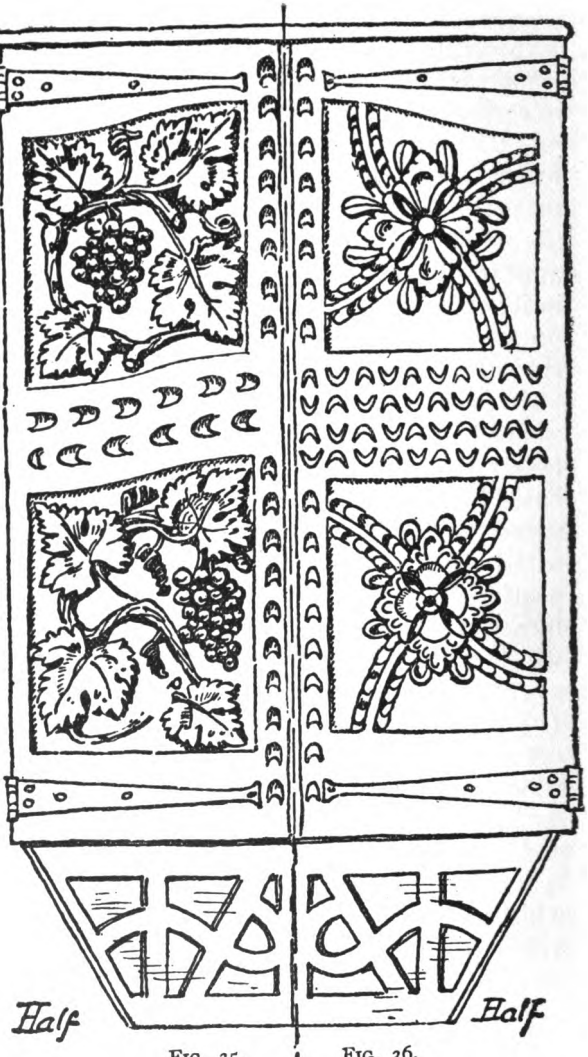


FIG. 35. FIG. 36.

enough to note such close elaboration in so small a space. This, of course, would entirely depend upon the purpose for which the carving was intended, and whether it was meant for distant view or close inspection. As there is arrangement necessary in forming the outline, so there is just as much required in designing the articulation of the surfaces of the leaves, which should be so treated that their hollows fall into a semblance of some kind of pattern.

Fig. 36 is a more formal design, or, to use a very much abused word, more "conventional," in which such leafage as there is only serves the purpose of ornamental points, marking the divisions of the general design. The gouge work upon the leaves should be of the simplest description, but strict attention is necessary in drawing the grooves, so that their forms may be clear and emphatic, leaving no doubt as to the pattern intended. Designs of this kind have no interest whatever except as pieces of patterned work, to which end every other consideration should be sacrificed. It must not be cut too deep—say $\frac{1}{4}$ in. at the deepest—and the sides of the panels should be very gently hollowed out with a flattish sweep (see section on Fig. 37) in

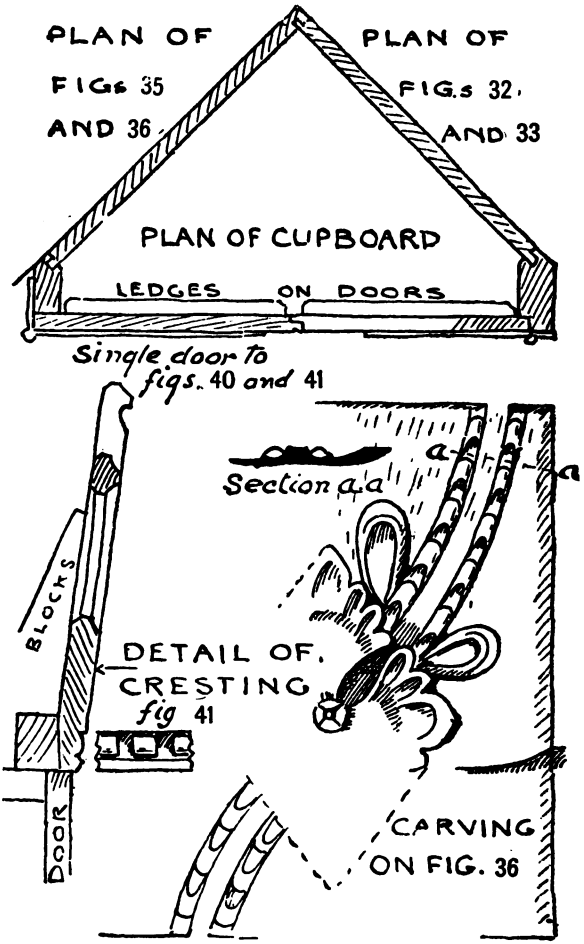

PLAN OF
FIGS 35
AND 36
PLAN OF
FIGS 32,
AND 33
PLAN OF CUPBOARD
LEDGES ON DOORS
Single door to
figs. 40 and 41
a
Section a.a
a
BLOCKS
DETAIL OF
CRESTING
fig 41
DOOR
CARVING
ON FIG. 36

FIG. 37.

order to avoid any appearance of actual construction in what more or less imitates the stiles and rails of a door. Fig. 37 shows a portion of the leafage to a larger

Fig. 38.

scale, and also a plan explaining the construction of all these cupboards.

Fig. 40 is designed upon the barest suggestion of natural foliage, the wavy

stem being quite flat, and running out flush into the flat margins at the sides, connecting them together. The leaves in

FIG. 39 (*a*).

this case should be carved, leaving the veins standing solid; grooved veins would have a meager look upon such rudimentary leaves. Of course a more natural

treatment may be given to this kind of design, but in that case it would require to be carried all over the door, and replace the formally ornamental center panel. The

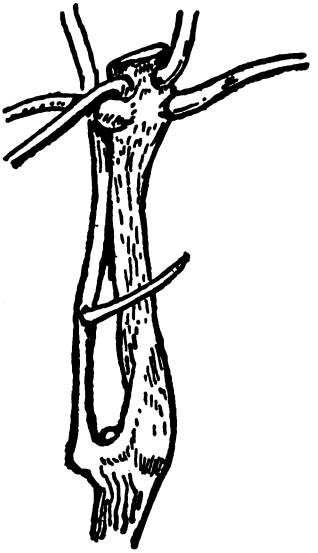


FIG. 39 (*b*).

pierced pattern in cresting should be done as already described for Fig. 24.

Fig. 41 is a variant on the last design. In this case a little more play of surface is attempted, making a point of carving the

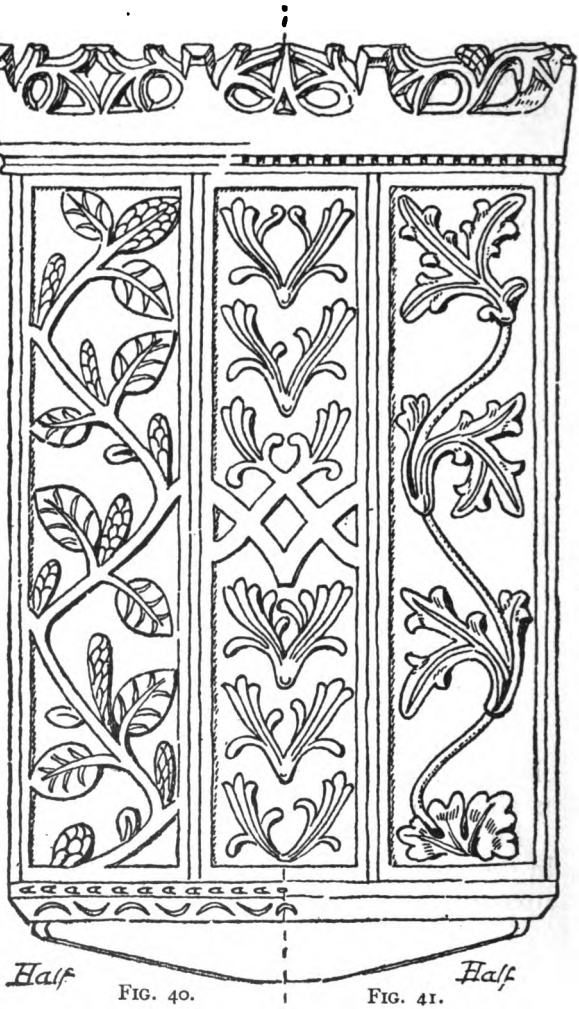


FIG. 40. FIG. 41.

side lobes of the leaves into little rounded masses which will reflect points of light. This is shown better on Fig. 42.

In carving foliage like that of the vine, where small dark holes or eyes occur,

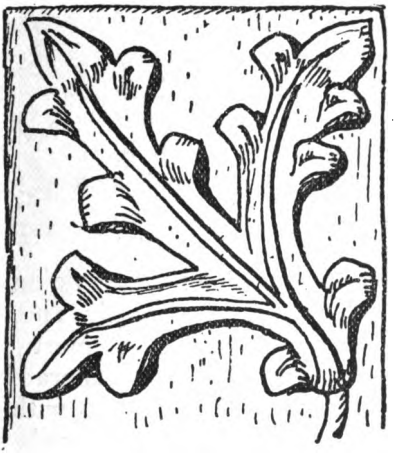


Fig. 42.

enough wood should be left round them to form deep dark little pits. They are very valuable as points of shadow. In doing this, cut the rim all round with a very slight bevel as in section, Fig. 43. Whenever leaves run out to a fine edge

they also should have a small bevel like this in order to avoid an appearance of weakness which acute edges always present. As a general rule leave as much wood as possible about the edges of leaves as you want shadow from them—dipping them only where you are sure the variety will be effective. In the execution of bunches of rounded forms like grapes there is no special mechanical expedient for doing them quickly and easily; each must be cut out separately, and carved with whatever tools come handiest to their shape and size. It is a good way to begin by cutting triangular holes between the grapes with the point of a small chisel (see Fig. 44), after which

FIG. 43.

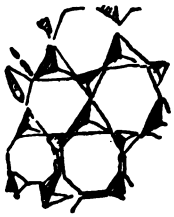


FIG. 44.

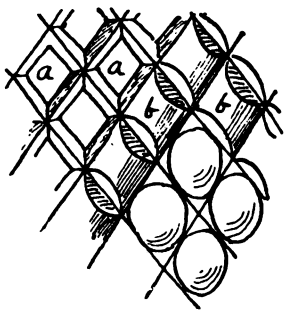


FIG. 45.

the rough shapes left may gradually be formed into ovals. When the work is very simple in character, and does not require a realistic treatment, the grapes may be done in a more methodical way, as in Fig. 45. First cut grooves across both ways with a V tool, dividing the grapes as at *a a*, then with a gouge turned hollow down round each line of grapes into rolls as at *b b*. Do this both ways, and afterward finish the form as best you can.

Hardwood Carving

CHAPTER XV

THE SKETCH-BOOK

Old Work Best Seen in its Original Place—Museums to be Approached with Caution—Methodical Memoranda—Some Examples—Assimilation of Ideas Better than Making Exact Copies.

IN holiday time, and as other opportunity arises, be sure to visit some old building, be it church or mansion. In this way you will make acquaintance with many a fine specimen of old work which will set your fancy moving. In the one there may be a carved choir-screen or bench ends, in

The Sketch-Book

the other a fireplace or table. The first sight of such things in the places and among the surroundings for which they were designed, is always an eventful moment in the training of a carver, because the element of surprise acts like a tonic to the mind by arousing its emulative instincts. It is by seeing such things in their proper home and associations that the best lessons are learned. One sees in that way, for instance, *why* the tool marks left by the old carvers on their work look more effective than smoothly perfect surfaces, when associated with the rough timbers of the roof, or the uneven surface of the plastered wall. One sees, too, the effect of time and friction in the polished surfaces of bench ends, rubbed and dusted by countless hands until they have become smooth to the eye and touch, and a mental note is made to avoid sharp or spiky work in anything that is likely to be within reach of the fingers. In this way a certain balance is given to the judgment in proportioning to each piece of work its due share of labor, and we come away with a fixed determination to pay more attention in future to breadth of design and economy of actual carving, a problem which no carver

finds easy, but which must be faced if wasted work is not to be his only reward.

In museums, too, we shall find many useful lessons, although there we see things huddled together in a distracting fashion which demands great wariness of selection. The great point to be observed

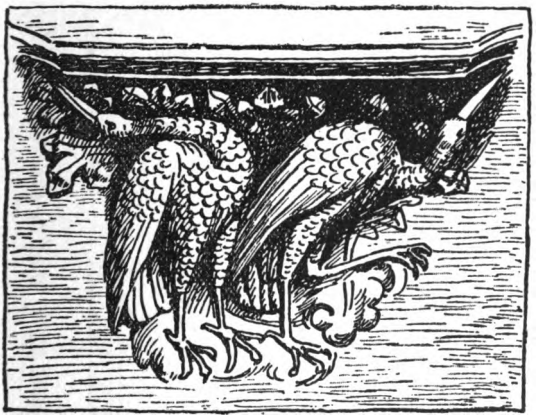


FIG. 46.

in making our notes for future reference is, that each sketch should contain some memorandum of a special quality, the one which attracted us at the time of making it. One may be made for sake of a general arrangement, another to remind us of some striking piece of detail or

AND DOE YOV NOT NOE MAN DESPISE
SECTION
OF
BEAM
NOEMA
Per John Sommerset. Set you merry and be you wise and do you not no man dyspise

FIG. 47.

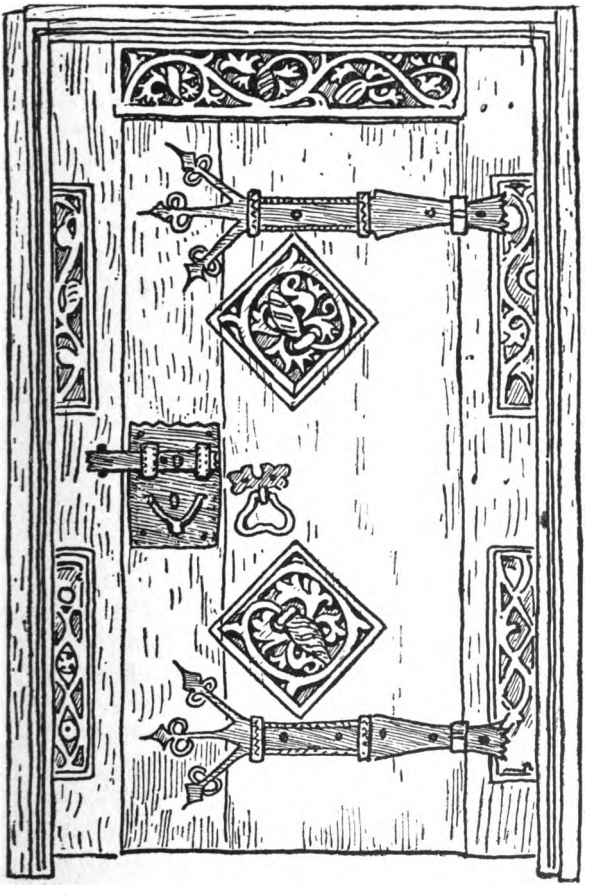


FIG. 48.

peculiarity of execution. The drawings need not be elaborate or labored, provided they make clear the points they were intended to record. Thus Fig. 46 is a sketch which is meant as a memorandum of a lively representation of birds, taken from an old Miserere seat. Fig. 47 was done for sake of the rich effect of an

Fig. 49.

inscription on the plain side of a beam, and also for the peculiar and interesting section to which the beam had been cut. Fig. 48, again, for sake of the arrangement of the little panels on a plain surface, and the sense of fitness and proportion which prompted the carver to dispose his work in that fashion, by which he has enriched the whole surface at little cost of labor, and by contrast enhanced

the value of the little strips and diamonds of carved work, otherwise of no particular interest. Figs. 49 and 50 are two sketches of Icelandic carved boxes. Fig. 49 was drawn as an example of the rich effect which that kind of engraved work may

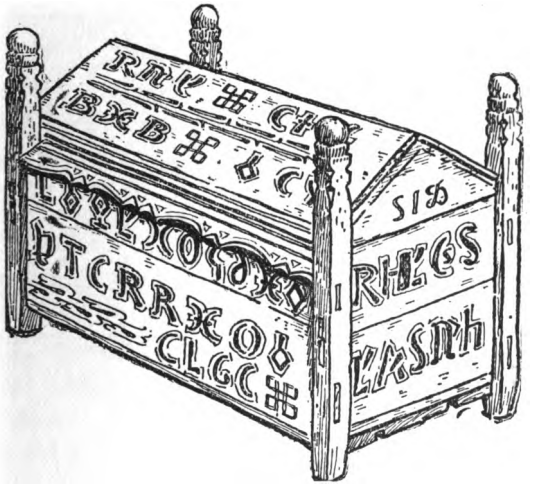


FIG. 50.

have, and of the use which it makes of closely packed letters in the inscription. The pattern is, of course, a traditional Norse one, althought the carving is comparatively modern. The points to be noted in the other box were its quaint

and simple construction, the use of the letters as decoration, more especially the unpremeditated manner in which they have been grouped, the four letters below

Fig. 51.

making a short line which is eked out by a rude bit of ornament. The letters are cut right through the wood, and are surrounded with an engraved line. Fig. 51 was noted on account of the way in

which a very simple pierced ornament is made much of by repetition. The ornament is on a Portuguese bed, and this is only a detail of a small portion. The effect greatly depends upon the quantity, but in this case that is a point which is easily remembered without drawing more of it than is shown. The fact that this work is associated with richly turned balusters is, however, noticed in the sketch, as that might easily be forgotten. Figs. 47 to 51 are from South Kensington Museum.

Then we come to the sketch of a chair (Fig. 52), or combined table and chair. The richly carved back is pivoted, and forms the table top when lowered over the arms, upon which it rests. The points to be noted in this are, the general richness of effect, the contrast of wavy and rigid lines, and the happy way in which the architectural suggestion of arch and pillars has been translated into ornament. As this sketch was not made so much for the chair itself as for its enriched back, no measurements have been taken; otherwise chairs, as such, depend very much upon exact dimensions for their proportions. This chair is at Exning in Suffolk.

Now we shall suppose that you are

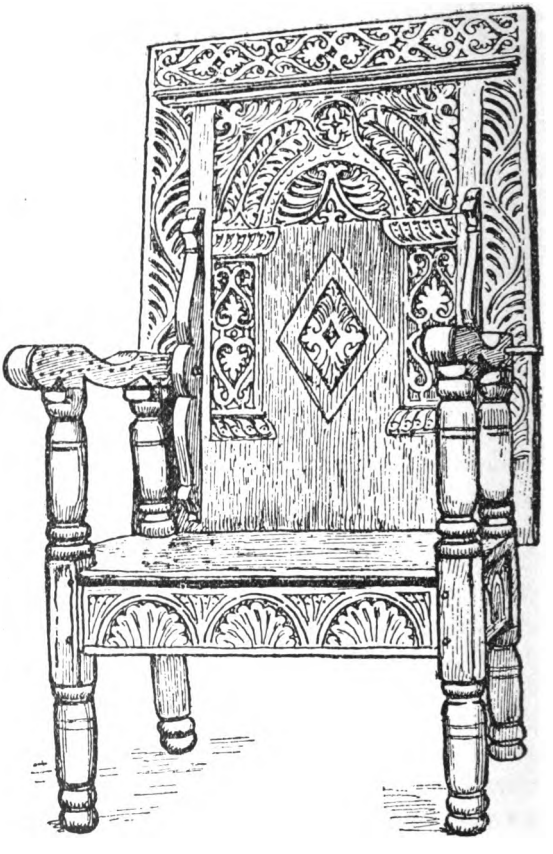


FIG. 52.

going to make many such sketches both in museums and in country churches or houses. You will find some too elaborate for drawings in the time at your disposal, in which case you should obtain a photograph, if possible, making notes of any detail which you wish particularly to remember—such, for instance, as the carved chest shown in Plate I. The subject, St. George and the Dragon, is given with various incidents all in the one picture. This is a valuable and suggestive piece of work to have before you, as the manner in which the pictorial element has been managed is strikingly characteristic of the carver's methods, and well adapted to the conditions of a technique which has no other legitimate means of dealing with distant objects. The king and queen, looking out of the palace windows, are *almost* on the same scale as the figures in the foreground; the walls of the houses, roofs, etc., have apparently quite as much projection as the foreground rocks—distance is inferred rather than expressed. The very simple construction, too, is worth noting. It is practically composed of three boards, a wide one for the picture, and two narrower ones for ends and feet.

The object in making these sketches should be mainly to collect a variety of ideas which may brighten the mind when there is occasion to use its inventive faculties. Suggestive hints are wanted; rarely will it be possible, or wise, to repeat anything exactly as you see it. These sketches, if made with care, and from what Constable used to call "breeding subjects," will give your fancy a very necessary point of vantage, from which it may hazard flights of its own.

As much of our knowledge must necessarily be gained from museums, and as they now form such an important feature of educational machinery, I think it will be well to devote a word or two of special notice to the drawbacks which accompany their many advantages. This I propose to do in the following chapter.

CHAPTER XVI

MUSEUMS

False Impressions Fostered by Fragmentary Exhibits —Environment as Important as Handicraft—Works Viewed as Records of Character—Carvers the Historians of their Time.

Museums

A NEW world of commerce and machinery, having slain and forgotten a past race of artist craftsmen, makes clumsy atonement by sweeping together the fragments of their work and calling the collection a museum. From the four corners of the earth these relics have been gathered. Our hungry minds are bidden to make choice according to fancy, for here is variety of food! Here are opportunities, never before enjoyed by mortal, for an intellectual feast!—and of a kind which might be considered god-like, were it not for the suspicion of some gigantic joke. That out of all this huge mass of chaotic material we have not as yet been able to make for ourselves some living form of art, must indeed be to the gods a continual subject of merriment.

Museums of art are in no respect the unmixed blessings which they appear to

be. They have, to be sure, all the advantages of handy reference; but at the same time, on account of the great diversity in the character of their exhibits, they tend to encourage the spread of a patchy kind of knowledge, far from being helpful to the arts in the interests of which they are established. It must be remembered that, in these collections, all specimens of architecture and architectural carving are invariably seen in false positions. All have been wrenched from their proper settings, and placed, more or less at random, in lights and relationships never contemplated by their designers. To the environment of a piece of architecture, and the position and surroundings of carved decorations, are due quite half of their interest as works of art. Deprive them of these associations, and little is left but fragmentary specimens of handicraft, more or less unintelligible in their lonely detachment, misleading to the eye, and dangerous as objects of imitation, in proportion to the dependence they once had upon those absent and unknown associations.

The educational purpose which these collections are intended to serve is liable to be construed into an unreasoning as-

sumption that every specimen exhibited is equally worthy of admiration. How often the plodding student is to be seen carefully drawing and measuring work of the dullest imaginable quality, with no other apparent reason for his pathetically wasted industry!

It would be strange, indeed, if all in this vast record of past activity was of equal value; if merely to belong to the past was a sure warrant that such work was the best of its kind. Far from this being the case, it requires the constant use of a more or less trained and critical judgment to separate what is good from the indifferent or really bad in these collections, for all are usually present. There is inequality in artistic powers, in technical skill, and a distinction of yet greater importance, which lies in the significance the works bear as records of the inner life of their creators. Artists, carvers in particular, are the true scribes and historians of their times. Their works are, as it were, books—written in words of unconscious but fateful meaning. Some are filled with the noblest ideals, expressed in beautiful and serious language, while others contain nothing but sorry jests and stupidities.

As all the works of the past, whether good or bad, are the achievements of men differing but little from ourselves, save in the direction of their energies and in their outward surroundings, there is surely some clue to the secret of their success or failure, some light to be thrown by their experience upon our own dubious and questioning spirit.

What better could we look for in this respect than a little knowledge of the lives led by the carvers themselves, a mental picture of their environment, an acquired sense of the influence which this, that, or the other set of conditions must have imposed upon their work. With a little aid from history in forming our judgments, their works themselves will assist us—so faithful is the transcript of their witness—for, with more certainty than applies to handwriting, a fair guess may be made by inference from the work itself as to the general status and ideals of the workman. The striking analogy between its salient characteristics and the prevailing mood of that ever-changing spirit which seeks expression in the arts, is nowhere more marked than in the work of the carver.

CHAPTER XVII

STUDIES FROM NATURE—FOLIAGE

Medieval and Modern Choice of Form Compared—A Compromise Adopted—A List of Plant Forms of Adaptable Character.

IT is high time now that we had some talk about the studies from nature which are to furnish you with subjects for your work. I shall at present deal only with studies of foliage, as that is what you have been practising, and I wish you to carry on your work and studies as much as possible on the same lines. Studies from Nature—Foliage

Between the few abstract forms, representing a general type of foliage, so dear to the heart of the medieval carver, and the unstinted variety of choice displayed in the works of Grinling Gibbons and his time, there is such a wide difference that surely it points to a corresponding disparity of aim. Although there is no doubt whatever that such a striking change of views must have had its origin in some deeper cause than that which is to be explained by artistic and technical development, yet I think that for our immediate

Studies from Nature—Foliage

purpose we shall find a sufficiently good lesson in comparing the visible results of the two methods. Broadly speaking, then, the medieval carver cared more for general effect than for possibilities of technique. He therefore chose only such natural forms as were amenable to his preconceived determination to make his work telling at a distance. He had no botanical leanings, and rejected as unfit every form which would not bend to his one purpose—that of decoration on a large scale—and which he aimed at making comprehensive at a glance, rather than calling for attention to its details. He invented patterns which he knew would assist in producing this result, and here he further handicapped his choice by limiting it to such forms as would repeat or vanish at regulated intervals, reflecting light or producing shadow just where it was wanted to emphasize his pattern.

The more modern carver, on the contrary, offered an all-embracing welcome to every form which presented itself to his notice. He rejected nothing which could by any possibility be carved. Nothing was too small, too thin, or too difficult for his wonderful dexterity with the carving tools. His chief end was elaboration of

detail, and it was often carried to a point which ignored the fact that nearly all of it would become invisible when in position, or, if seen at all, would only appear in confused lumps and unintelligible masses.

Studies from Nature—Foliage

Now, for many reasons, I think we had better take the medieval method as our model up to a point, and make a certain selection of material for our studies, based upon some relation to general effect, but not necessarily imitating a medieval austerity of rejection, which would be the merest affectation on our part. Upon these principles, and taking somewhat of a middle course, I shall here note a few types of foliage which I think may be useful to you in the work upon which you are engaged.

Leaf forms, with their appropriate flowers or fruit, afford the carver a very large proportion of his subject material. They serve him as principal subject, as bordering or background to figures of men or animals; they occur as mere detached spots, to break the monotony of spaces or lines; and in a thousand other ways give exercise to his invention.

As a general rule, those leaves with serrated, or deeply cleft and indented edges,

Studies from Nature—Foliage

lend themselves most readily to decorative treatment. Large, broad leaves, with unbroken surfaces, and triangular or rounded outlines, are less manageable. Those most commonly taken as models are:

The Vine, with its Grapes.—This was freely used by medieval carvers, at first for its symbolic significance, but afterward even more on account of its rare beauty of form. The play of light and shade on its vigorous foliage, the variety of its drawing in leaf, vine, and tendril, and the contrast afforded by its bunches of oval fruit, caused it to be accepted as a favorite subject for imitation in all kinds of carving. It lends itself kindly to all sorts of relief, either high or low, in almost any material. It is so recognizable, even in the rudest attempts at imitation, that its popularity is well deserved.

The hop-vine shares some of these qualities, though much less strongly marked in character.

The Acanthus.—This leaf was first adapted for the purpose of ornament by the workmen of classical Greece. The inspiration was one of the few which they took directly from nature's models. It was also freely used by medieval carvers,

but with an insistence upon the flowing and rounded character of its surface forms; and again by the Renaissance artists, with a return to its classical character of fluted and formal strength of line. The graceful drawing of its elaborately articulated surface, and the extraordinary accentuation of its outline, provide an endless source of suggestion. It has been adapted in all manners, according to the fancy of the carver—sometimes long and drawn out, at others wide and spreading. Altogether it has been more thoroughly "generalized" than any other natural form.

The Oak, with its Acorns, appears in early medieval work, but without much attempt to represent its form with anything like individual character. In later work it has more justice done to its undoubted merits as a decorative feature by a clearer recognition of its beauty in clumps and masses. Fruit, other than the grape and a nondescript kind of berry, was seldom represented by medieval craftsmen; it formed, however, a marked feature in Renaissance ornament, where pomegranate, apple, fig, and melon were in constant requisition.

Studies from Nature—Foliage

Flowers in general were very little used in early times, and then only in a highly abstract form corresponding to that of the foliage. The rose and lily were the two most frequently seen, but they seldom had more individuality about them than was sufficient to make them recognizable. During the Renaissance flowers were treated with much more regard to their inherent beauties, and were represented with great skill and power of imitation, although often carried beyond legitimate limits in this direction. When dealt with as ornaments, rather than botanical details, they form a rich source of suggestion to the carver, and offer a ready means of contrast with masses of foliage. The rose and lily are such conspicuous flowers that they should, in modern times, be used in a way consistent with our demands for individual character and likeness. They should be fairly well defined and easily recognizable. It is quite possible to treat these flowers in a very realistic way, without endangering their effect as decorative details: they have both such distinguished forms in flower and foliage.

Flowers should be chosen for their *forms;* color should not be allowed to

deceive the eye in this respect, unless the color itself is suggestive of lines and contours.

Studies from Nature—Foliage

Foliage should always be studied at its prime, never when it is dried and contorted in its forms.

Here is a short list of subjects, including those I have mentioned, all having a sufficiently pronounced character to make them valuable as stock in trade. Many more might be named, but these are chosen as being commonly familiar, and as being representative types of various forms.

For their Leaves and Fruit.—The grape-vine, hop-vine, globe artichoke, tomato, apple, plum, pear, bramble, and strawberry.

For Fruit and Vine-like Growths (*leafage too massive and smooth to be of much value without adaptation*).—The melon, vegetable-marrow, pumpkins, and cucumber.

For Leafage, Flowers, or Seed Vessels.—The acanthus, oak, thistles, teazle, giant hemlock, cow-parsley, buttercup.

Of Garden Flowers.—The rose, lily, larkspur, peony, poppies, columbine, chrysanthemum, tulip, Christmas rose, Japanese anemone.

For Close and Intricate Designs.—Peri-

winkle, winter aconite, trefoils of various kinds.

Many valuable hints on this subject may be gleaned by a study of Gerrard's Herbal, which is full of well-drawn illustrations, done in a way which is very suggestive to the designer.

A careful study of the outline forms of leaves is a schooling in itself, so much may be learned from it. It teaches the relation between form and growth in a way which makes it possible to use the greatest freedom of generalization without violating structural laws. The same causes which govern the shaping of a tree are present in the leaf, settling its final outline, so that, however wandering and fantastic it may appear, there is not the smallest curve or serration which does not bear witness to a methodical development, and to every accidental circumstance which helped or hindered its fulfilment.

You could not do better than make a collection of suitable leaves, press them flat and trace them very carefully, keeping the tracings together in a book for reference. Accompanying this you should have in each case a drawing of the leaf as it appears in its natural state, always

being careful to do this from a point of view which will accommodate itself to carving the leaf if you should have occasion to use it.

Studies from Nature—Foliage

CHAPTER XVIII

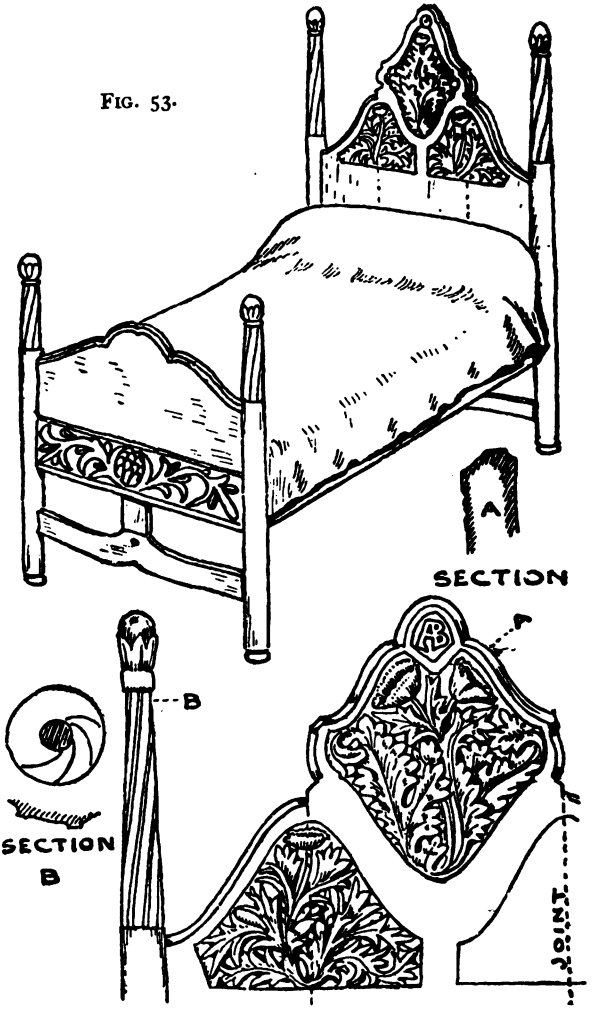
CARVING ON FURNITURE

Furniture Constructed with a View to Carving—Reciprocal Aims of Joiner and Carver—Smoothness Desirable where Carving is Handled—The Introduction of Animals or Figures.

YOU will find in the illustrations, Figs. 53 to 62, certain suggestions for various pieces of furniture. They are given with the intention of impressing upon you the fact that very little carving can be done at all without some practical motive as a backbone to your fancies. To be always carving inapplicable panels is very dull work, and only good for a few preliminary exercises. It is much better to consider the matter well, and resolve upon some "opus," which will spread your efforts over a considerable period. When you have decided upon the piece of furniture which is most likely to be useful to you, and

Carving on Furniture

FIG. 53.



which lies within your powers of design and execution, then make a drawing for it, and have it made by a joiner (unless you can make it entirely yourself), to be put together in loose pieces for convenience of carving, and glued up when that is finished. You should certainly design the piece yourself, as you should make all your own designs for the carving. The two departments must be carried on in the closest relation to each other while the work is in progress, otherwise their association will not be complete when it is finished. Take, for instance, the head of the bed in the illustration. Why should it stand up so high, like the gable of a house? It is for no other reason than to give an opportunity for carving. A plain board of half the height would have been just as effective as a protection to the sleeper. Useless as carving may be from this practical point of view, it must nevertheless be amenable to utilitarian laws. It must be smooth where it is likely to be handled, as in the case of the knobs on top of the posts; and even where it is not likely to be handled, but may be merely touched occasionally, it should still have an inviting smoothness of surface. As a

matter of fact, all carving on a bed should be of this kind, with no deep nooks or corners to hold dust. Here, then, are a number of conditions, which, instead of being a hindrance, are really useful incentives to fresh invention. Just as the construction of joiner's work entails concessions on the part of the carver, so the carver may ask the joiner to go a little out of his way in order to give opportunities for his carving. A little knowledge of this subject will make a reasonable compromise possible.

You will find a further advantage in undertaking a fairly large piece of work. As it is almost certain to be in several parts, each may thus receive a different treatment, by which means you not only obtain contrast, but get some idea of the extraordinary power with which one piece of carving affects another when placed in juxtaposition. Whatever designs you may decide upon, should you undertake to carve the panels for a bed, let them be in decidedly low relief. The surface must be smoothly wrought, doing away with as much of the tool marking as you can, but this smoothing to be done entirely with the tools, not by any means with glass

paper. Great attention must be paid to the drawing of the forms, as it is by this that the impression of modeling and projection will be expressed. A very pleasant treatment of such low relief when a smooth and even appearance is wanted,

FIG. 54.

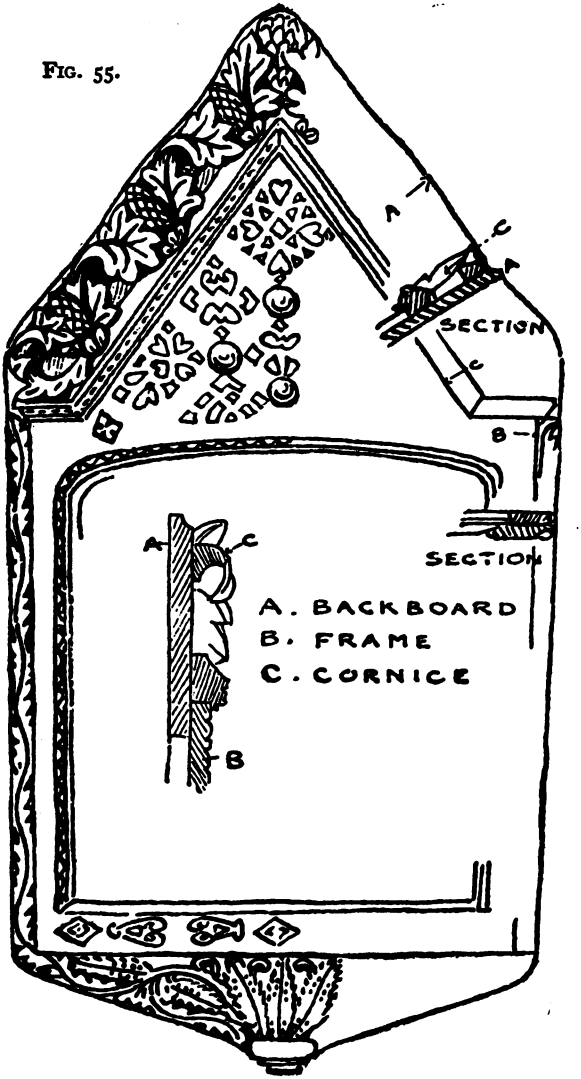
is to carve the ground to the full depth, say ⅛ in., only along the outlines of the design, and form the remainder into a kind of raised cushion, almost level in the middle with the original surface of the wood. The whole design need thus be little more than a kind of deepish

engraving, depending for its effect upon broad lights defined by the engraved shadows. See Fig. 54 for an example of this treatment applied to letters.

Now I expect you to make a fresh design. The illustrations in all such cases are purposely drawn in a somewhat indefinite way, in order that they may suggest, without making it possible to copy.

Now we come to the mirror frame, Fig. 55. I should suggest that this be done in some light-colored wood like pear-tree, which has an agreeably warm tone, or if a hard piece of cedar can be found, it would look well, but in no case should polish be added except that which comes from the tool. The construction need not be complicated. Take two ¾-in. boards, glue them together to form the width, shape out the frame in the rough. Put behind this another frame of ¾-in. thick stuff, and make the cornice out of wood about 1½ in. thick. The parts to be kept separate until the carving is finished, and afterward glued or screwed together. The carving on the body of the frame, that is, in the gable above and the front of bracket below, should be in very

FIG. 55.



low relief, the lower part being like the last, a kind of engraving. The fret above may be sunk about $\frac{1}{16}$ in. and the ground slightly cushioned. The carving on sides and cornice is of a stronger character, and may be cut as deeply as the wood will allow, while the cornice is actually pierced through in places, showing the flat board behind. The design for this cornice should have some repeating object, such as the kind of pineapple-looking thing in the illustration, and its foliage should be formed with plenty of well-rounded surfaces, that may suggest some rather fat and juicy plant.

In Fig. 56 you have a suggestion for carving a bench or settle, the proportions of which have been taken from one found at a Yorkshire village inn. The actual measurements are given in order that these proportions may be followed. It is a well-known fact, that chairs, or seats of any kind, can not be successfully designed on paper with any hope of meeting the essential requirements of comfort, lightness, and stability. Making seats is a practical art, and the development of the design is a matter of many years of successive improvements. A good model

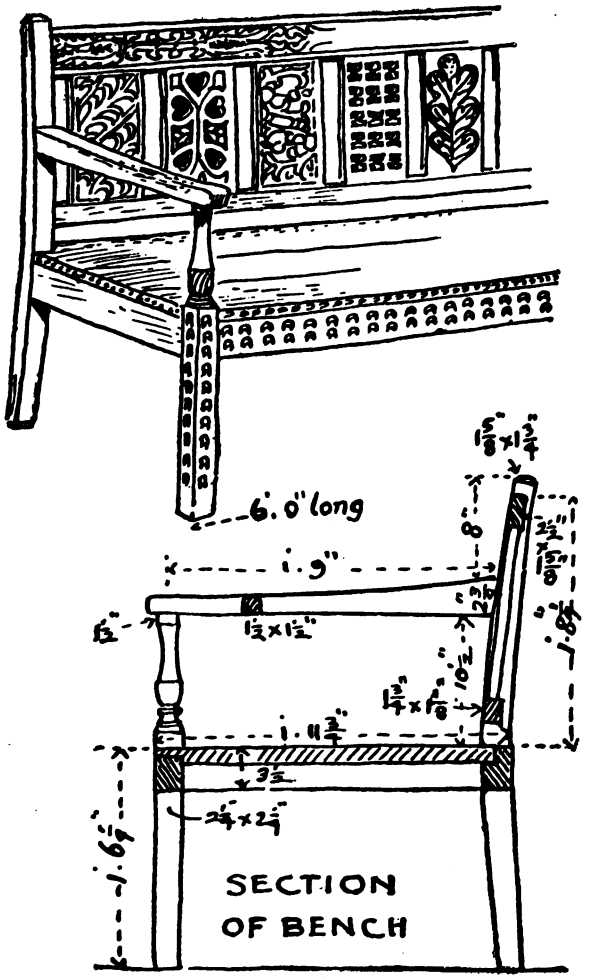


FIG. 56.

should therefore be selected and copied, with such slight changes as are necessary where carving is to be introduced. The main lines should not be interfered with on any account, nor should the thickness of the wood be altered if possible. The carving on this settle is intended to be in separate panels, about two inches apart. These panels will look all the better if no two are quite alike; a good way to give them more variety will be to make every alternate one of some kind of open pattern, like a fret. These piercings need not extend all over the design in the panel in every case: some may have only a few shapely holes mixed up with the lines, others again may be formed into complete frets with as much open as solid. (See Fig. 57.)

The carving should be shallow, and not too fine in detail, as it will get a great deal of rubbing. The material should be, if possible, oak; but beech may be used with very good effect—in neither case should it be stained or polished.

Fig. 58 is a clock case. Something of this kind would make an excellent "opus" such as I have alluded to, and give plenty of scope for invention. As clocks of this

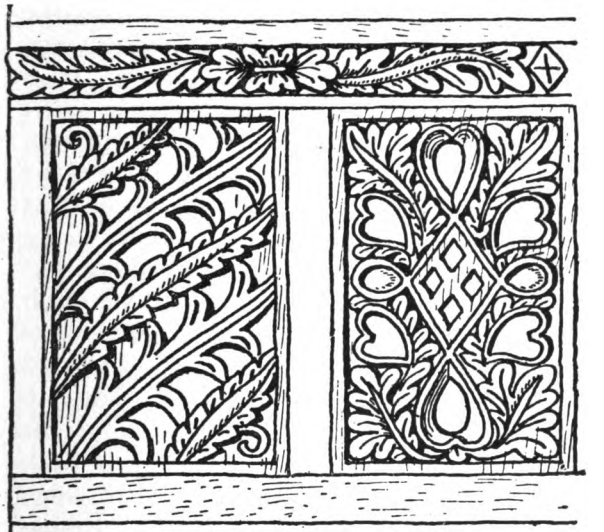
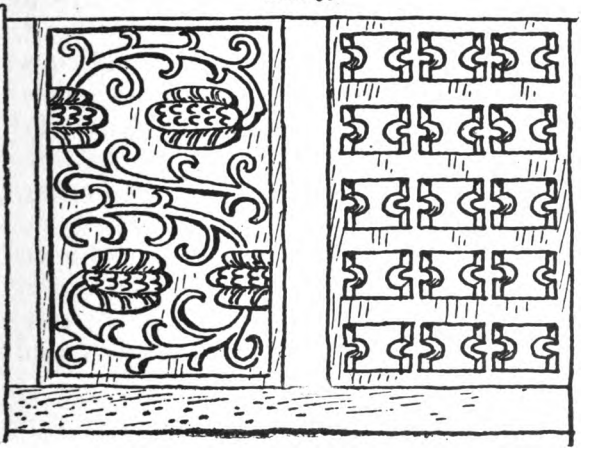
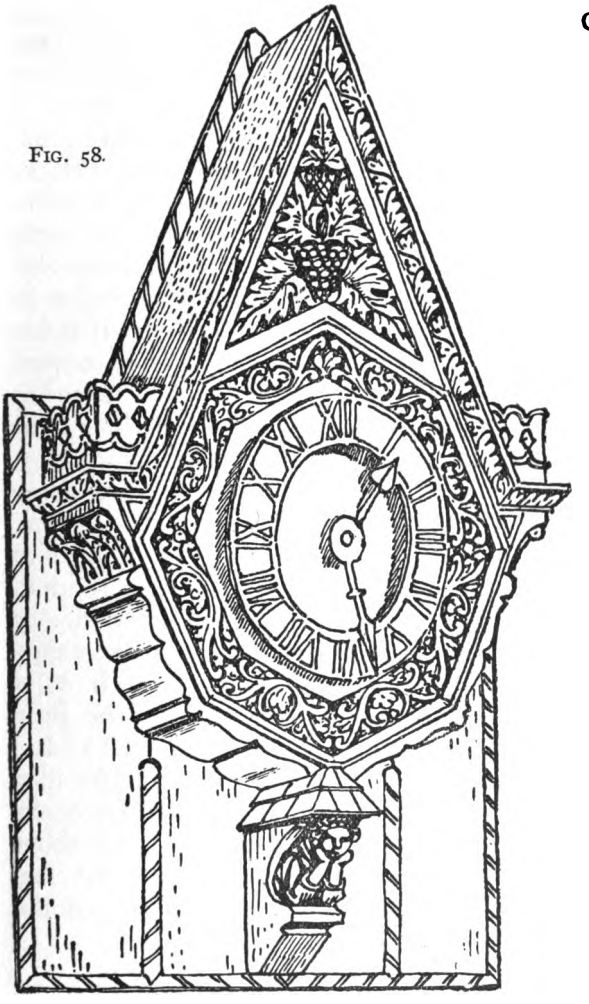


FIG. 57.



kind are generally hung on a wall, the brackets, from a practical point of view, are of course unnecessary, but as it is important that they should *look* as if they were supported and to satisfy the eye, something in the way of a bracket or brackets is generally added. A bracket like the one in the illustration, not being a real support constructively speaking, but only put there to give assurance that such has not been overlooked or neglected, becomes a kind of toy, and may be treated as such by adding some little fancy to make it amusing, and give an excuse for making a feature of it. This will be a good place to try your hand at some modest attempt at figure work. In designing your bracket, should you wish to introduce a little figure of man or beast, I think you will find it more satisfactory if the figure is separated from the structural part by a slight suggestion of solid surroundings of its own. Thus the little roof over, and the solid bit of wood under, the figure in the illustration serve this purpose, lending an appearance of steadiness which would be wanting in a bracket formed of a detached figure. At any rate, never make your figures, whether of man

FIG. 58.



or beast, seem to carry the clock; you may hunch them up into any shape you like, but no weight should be supposed to rest upon them.

For sake of the carving, oak will be the best wood to employ in making this clock, or one like it, but Italian walnut will do equally well. The size should be fairly large, say about three feet over all in height. This will give a face of about ten inches in diameter, which face will look best if made of copper gilt, and not much of it, perhaps a mere ring, with the figures either raised or cut out, leaving nothing but themselves and two rings surrounding. This should project from the wood, leaving a space of about one inch.

If you are inclined to try a heavier piece of work, the bench or settle-end in Fig. 59 may give you a suggestion. In this there is a bird introduced in the shape of a cock roosting on the branch of a tree. It would require to be done in a thick piece of wood, say 3 ins. thick, and would be best in English oak. The idea will be, to cut away the wood from the outer lower portion, leaving only about 1¼ or 1½ in. thickness, but at the top retaining the full thickness; in which the

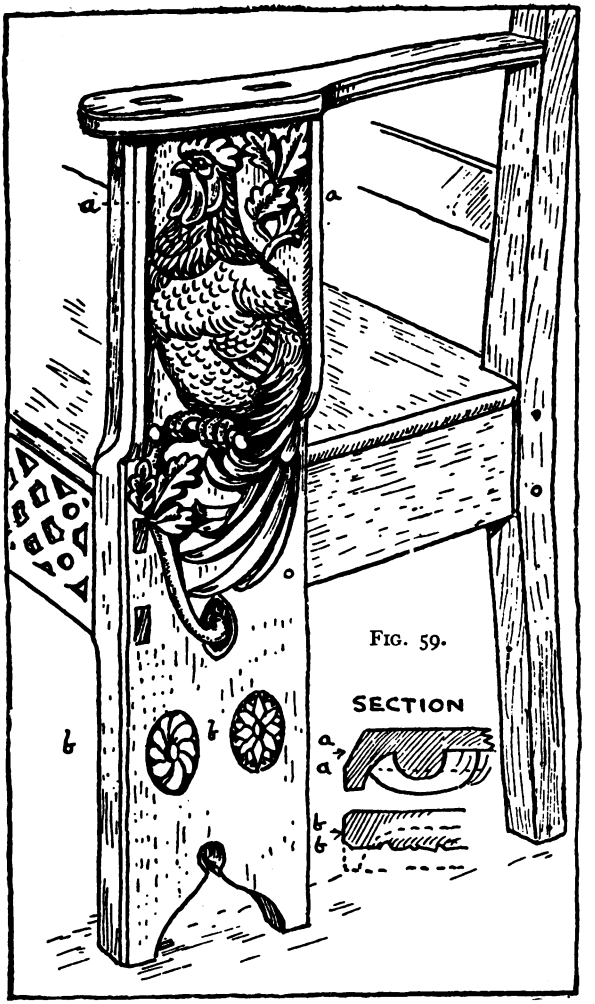


FIG. 59.

bird must be carved, the outer edges being kept full thickness in order to give the structural form and enclose the carving. The inside of this upper part, toward the seat, should also be carved, but with a smooth and shallow pattern of

Fig. 60.

some kind, as both may be seen together, and in contrast to each other.

The introduction of figures leads me to a subject which it will be better to discuss in the next chapter, i.e., the question as to how far it is possible or consistent with

present conditions to attempt anything that may bear the character of humor. But in the meantime here are three more subjects upon which fancy and ingenuity may be expended with profit. In Fig. 60 you have a heraldic subject. In all such cases the heraldry should be true, and not of the "bogus" kind. This shield represents a real coat of arms, and was done from a design by Philip Webb, being finally covered with gesso, silvered and painted in transparent colors.

Figs. 61 and 62 are suggestions for wooden crosses, oak being the best material to use for such a purpose. The carving should be so arranged as to form some kind of pattern on the cross. In Fig. 62 the black trefoils are supposed to be cut right through the thin pieces of wood forming the center portion, and the carving on that part is very shallow.

FIG. 61.

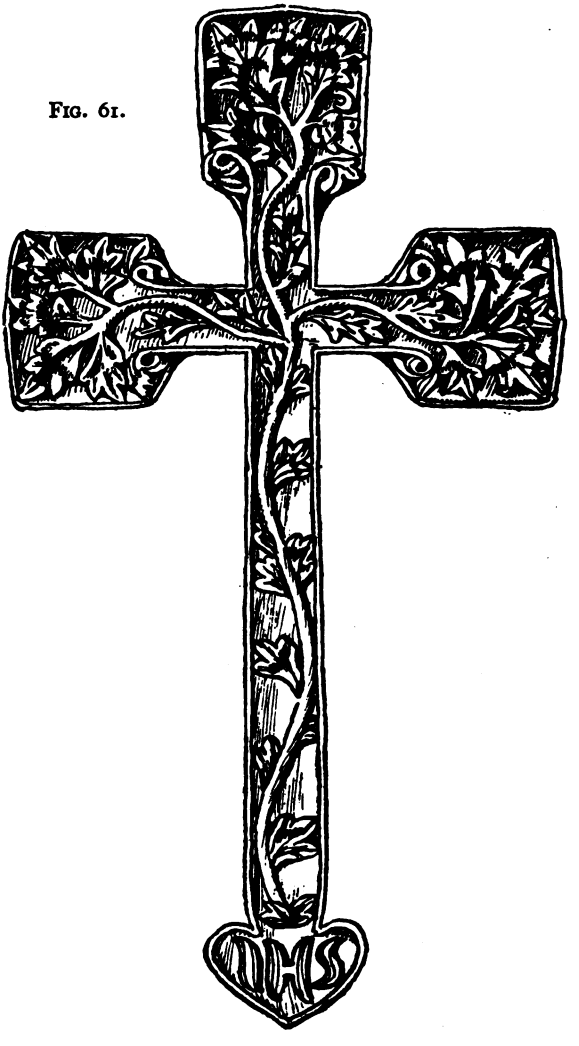
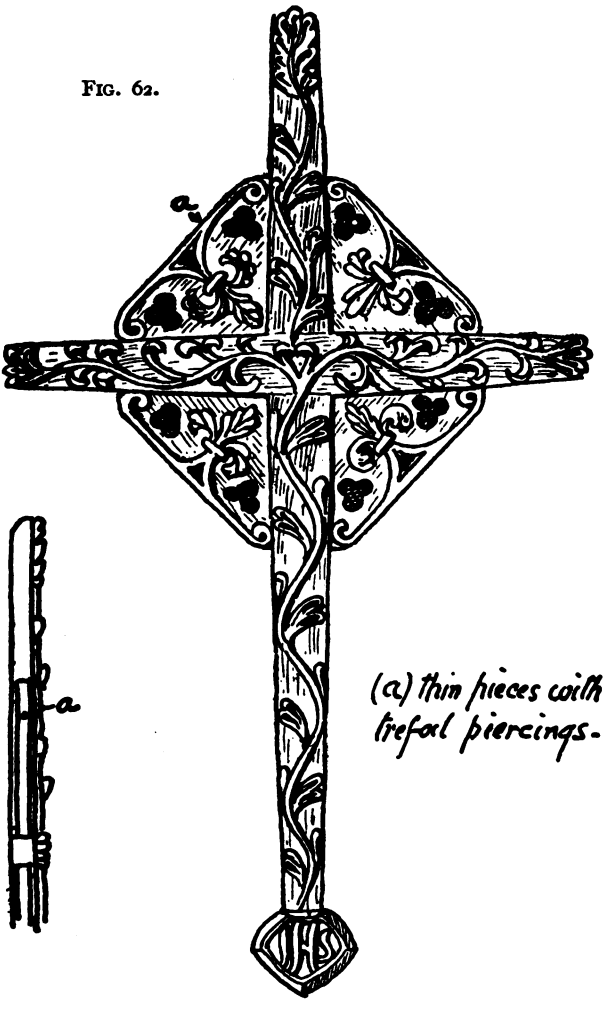


FIG. 62.



CHAPTER XIX

THE GROTESQUE IN CARVING

Misproportion not Essential to the Expression of Humor—The Sham Grotesque Contemptible—A True Sense of Humor Helpful to the Carver.

The Grotesque in Carving

THE dulness which comes of "all work and no play" may be said to affect the carver at times. He tires of carving leaves and ornaments: what more natural than to seek change and amusement in the invention of droll figures of men or animals? The enjoyment which we all feel in contemplating the outcome of this spirit in ancient work, leads us to the imitation of both subject and manner, hoping thereby that the same results may be obtained; but somehow the repetition is seldom attended with much success, while of original fancies of the same sort we are obliged to confess ourselves almost destitute. Who can behold the fantastic humors of Gothic carvings without being both amused and interested? Those grotesque heads with gaping mouths recall

the stories of childhood, peopled with goblins and gnomes. It is all so natural, and so much in keeping with the architecture which surrounds it, the carving is so rude and simple, that it seems absurd when some authority on such matters makes a statement to the effect that all such expression of humor has become forever impossible to ourselves.

This important part of the question must be left to your own meditation, to settle according to your lights; experience will probably lead you ultimately to the same opinion. Meantime, the point I wish to impress upon you is this, that until you feel yourself secure, and something of a master of various branches of your craft, you should not attempt any subject which aims at being decidedly grotesque. There are very good and practical reasons for this; one is, that while you are studying your art, you must do nothing that may tend to obscure what faculties you have for judging proportion. Now, as all grotesque work is based more or less on exaggeration, it forms a very dangerous kind of exercise to the beginner, therefore I should never allow a pupil of mine to so much as attempt it. Do not think

that I wish to discourage every effort which has not an ultra-serious aim. On the contrary, I am but taking a rather roundabout way to an admission that the humorous element has, and must have at all times, a powerful attraction for the wood-carver; and to the statement of an opinion that it should not be allowed to take a prominent place in the work of a student; moreover, that it is quite possible to find in nature a varied and unfailing source of suggestion in this respect (more, in fact, than we are ever likely to account for), and which requires no artificial exaggeration to aid its expression. Some tincture of the faculty is absolutely necessary to the carver who takes his subjects from birds or beasts, in order that he may perceive and seize the salient lines and characteristic forms, of which the key-note is often to be found in a faint touch of humor, and which, like the scent of a flower, adds charm by appealing to another sense.

The same argument applies to the treatment of the human figure. Let no student (and I may include, also, master-carver) think that a grotesque treatment will raise the smile or excite the interest

which is anticipated. The "grotesque" is a vehicle for grim and often terrible ideas, lightly veiled by a cloak of humorous exaggeration; a sort of Viking horse-play—it is, in fact, a language which expresses the mixed feelings of sportive contempt and real fear in about equal proportions. When these feelings are not behind the expression, it becomes a language which is in itself only contemptible.

The Grotesque in Carving

If, carried away by fancy, you must find vent for its impulses, and carve images of unearthly beings, at least make them cheerful looking; one can imagine such demons and goblins as being rather nice fellows than otherwise. A grim jest that fails is generally a foolish one—at least its perpetrator neither deserves nor receives sympathy for his discomfiture. Now, I shall show you one or two examples which may make this matter a little clearer to you, if you are at all inclined to argue the position. I think, at any rate, they will prove that the expression of humor does not always depend upon exaggeration, and may exist in a work which is, one may say, almost copied from nature. Fig. 63 is an example to

FIG. 63.

this effect. The little jester just emerging from a flower, one of the side-pieces to a Miserere seat carving, is undoubtedly a true portrait, carved without the slightest attempt at exaggeration. The quiet humor which it evinces required only sympathy to perceive and skill to portray on the part of its carver. He had nothing to invent in the common acceptation of the word. The carving of the mendicant, which comes on the other side, is equally vivid in its truth to nature. It is so life-like that we do not notice the humorous enjoyment of the artist in depicting the whining lips and closed eyes of the professional beggar. Observe the good manners of it all—the natural refinement of the artist who leaves his characters to make all the fun, without intrusion from himself other than to give the aid of his skill in representation. Now, subjects of this class will, in all probability, present themselves until the end of the world; but artists like this Gothic one are not so likely to be common. Great technical skill, a large fund of vitality, and many other controlling qualities are necessary to the production of such an artist; but he gives a clue to the right action, which

FIG. 64.

we may with safety accept, even if we can not hope to equal his performance.

The center-piece, Fig. 64, tells a little story of Samson. It is noticeable in these medieval picture subjects, how, when a story has to be told, the details are treated in a broad and distinct fashion, as if the

FIG. 65.

story could take care of itself, and only required to be stated clearly as to facts. The detached ornamental parts, on the contrary, receive a degree of careful attention not given to the picture, seemingly with the object of making their loneliness attractive.

The broad-humor characteristic of the

companion picture of medieval life, in the little domestic scene, Fig. 65, is equally free from forced exaggeration or intentional misproportion. Scale and anatomy, to be sure, have had little consideration from the carver, but we readily forgive the inaccuracies in this respect, on account of his quick wit in devising means to an end.

Before we leave this subject, look at Plate II, in which you will see a curious use of misproportion—intentional, too, in this case—and used for quite other than humorous purposes. This is a little ornamental figure from the tomb of Henry IV, in Canterbury Cathedral. You will see that the body is out of all proportion too small for the head which surmounts it, or too big for the feet upon which it stands. Now, what could have induced the carver to treat a dainty little lady thus? It certainly was not that he considered it an improvement upon nature, nor was it a joke on his part. It could only be done for some practical reason such as this: that the little figure does part duty as a bracket, hence, more appearance of solidity is required at the top, and less at the foot, than true proportions would

admit. It is all done so unostentatiously that one might look for hours at the

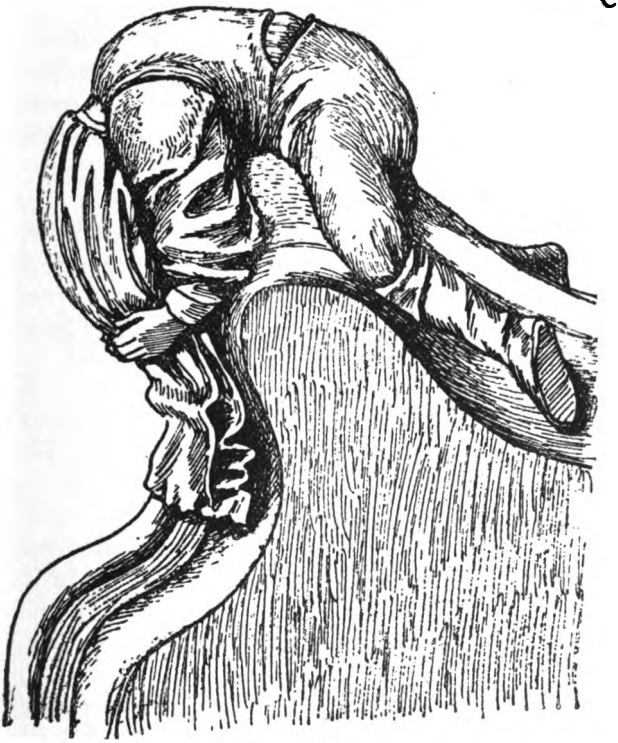


FIG. 66.

figure without noticing the license. Not that I should advise you to imitate this

naive way out of a difficulty. The childlike simplicity of its treatment succeeds where

FIG. 67.

conscious effort would only end in affectation.

In Fig. 66 you will see another little figure doing duty in connection with a

stall division in the Lady Chapel at Winchester Cathedral. Its smooth roundness of form is very appropriate to the position it occupies; while its polished surface bears ample testimony that it has given no offense to the touch of the many hands which have rested upon it. The Grotesque in Carving

Fig. 67 shows another example of the same sort, but perched on a lower part of the division. This one is from the cathedral at Berne, each division of the stalls having a different figure, of which this is a type.

CHAPTER XX

STUDIES FROM NATURE—BIRDS AND BEASTS

The Introduction of Animal Forms—Rude Vitality Better than Dull "Natural History"—"Action"—Difficulties of the Study for Town-Bred Students—The Aid of Books and Photographs—Outline Drawing and Suggestion of Main Masses—Sketch-Book Studies, Sections, and Notes—Swiss Animal Carving—The Clay Model: its Use and Abuse.

NOTHING enlivens or gives more variety of interest to wood-carving than the introduction of animal forms. They Studies from Nature—Birds and Beasts

make agreeable halting-places on which the eye may rest with pleasure. They are, in general, both beautiful in their shapes and associated with ideas which appeal strongly to the imagination, thus affording in masses of abstract ornament the pleasantest kind of relief by adding to it points of definite lineament and meaning.

To carve animals as they ought to be carved, one must have something more than a passing interest in their forms; there must be included also an understanding of their natures, and some acquaintance with their habits. A cattle-drover is likely to know the salient points of a bullock, a horse-breeder all those connected with a horse, and so on. We students, however, not having the advantage of such accurate and personal knowledge, must make shift in the best way we can to discover and note the points so familiar to trained eyes. To see animals in this way, and, with knowledge of their forms and habits, treat their sculptured images according to the laws of our craft, is no light task. If choice were to be made between a rude manner of carving —but which familiarity with the subject

invested with lively recognition of character—and a more cultured and elaborate, but lifeless study in natural history, there should be no hesitation in making choice of the former method, because animal forms, without some indication of vitality, are the dullest of all dull ornaments.

It is quite impossible to describe in words the kind of "action" which is most appropriate to sculpture, it being much more a question of treatment, and the guiding spirit of the moment, than a subject which can be formulated. As a broad and general principle which may be taken for guidance, you will always find yourself on surer ground in the attempt to indicate the *capacity* for energy and the suggestion of *movement,* than you will if your aim is the extremity of action in any direction. You may, with some justice, point to the illustration given in Fig. 65, and which appears to contradict this statement, as being an example in which violent action is the key-note. You must notice, however, that the two figures, although struggling, are for the moment still, or may be supposed so. There is enough suggestion of this pause to excuse the attitudes and save the composition

from restlessness—even the raised hands may be supposed to remain in the same position for a second or two. This imaginary pause, however infinitesimal, is essential to the dignity of the sculptor's art, as nothing is more irritating to the mind than being forced to recognize the contradiction between a motionless image and its suggestion of restless action. It is necessary to observe the same rule in the expression of actual repose, as some clue must be given, some completed action be suggested, in order to distinguish dormant energy from downright inertia. I should like to impress upon you the importance of making a special study of the characteristic movements of animals. You will in time become so far familiar with them that certain standards of comparison and contrast will be established in your mind as aids to memory. Thus you will be all the better able to carve with significance the measured and stately action of a horse, if you have in your mind's eye at the same time a picture of the more cumbrous and slower movements of a cow; and you will be helped in the same way when you are carving a dog, by remembering that the movements of a cat afford a

striking contrast, in being stealthy where the other is nervous and quick.

For the unfortunate town-bred student or artist, who has had few opportunities to study birds and beasts familiar to the country schoolboy, there is no other way but to make the best of stuffed birds, photographs, etc. Much may be done with these aids if a little personal acquaintance with their habits and associations is added like salt, to keep the second-hand knowledge sweet and wholesome.

In the absence of opportunity for study from the life, no pictures of animals can compare in their usefulness to the carver with those by Bewick. They are so completely developed in essential details, so full of character and expressive of life, that even when personal acquaintance has been made with their various qualities, a glance at one of his engravings of birds or beasts conveys new meaning, either of gesture or attitude, to what we have previously learned. Every student who wishes to make a lively representation in carving of familiar beast or bird should study Bewick's engravings of "Quadrupeds" and "Birds."

Studies from Nature—Birds and Beasts

Drawings made for the purpose of study need not be elaborate: indeed, such drawings are only embarrassing to work from. The most practical plan is to make a drawing in which the main masses are given correctly, and in about the same relative position that they will occupy in the carving. I give you in Plate VII an example of this in a drawing made by Philip Webb, who, by the study of a lifetime, has amassed a valuable store of knowledge concerning animals, and acquired that extraordinary skill in their delineation and the expression of character which is only to be attained by close observation and great sympathy with the subject. The drawing in question was made for myself at the time I was carving a lion for the cover of a book (given in Plate VIII). It was made, in his good-natured way, to "help a lame dog over a stile," as I had got into difficulties with the form. This drawing is all that a carver's first diagram should be, and gives what is always the first necessity in such preliminary outlines—that is, the right relationship of the main masses, and the merest hint of what is to come in the way of detail; all of which must be studied separately, but which would be entirely use-

less if a wrong start had been made. In Fig. 68 I give you tracings from some notes I made myself while carving the sheep in Plates V and VI. The object was to gain some definite knowledge of form by noting the relation of planes, sections of parts, projections, etc., etc. The section lines and side-notes are the most valuable part of the memoranda. In the same manner the illustration, Fig. 69, shows diagrams made from a heron, giving section lines of beak, etc.

The side-notes about the colors are valuable, as, although not translatable into carving, they do to some extent influence the manner of interpreting forms.

Photographs must not be despised, but they are only of use if read by the light of previous knowledge. For this reason you can not make too many notes of sectional structure through heads, necks, and legs, which will help to explain the mystery common to all photographs.

The bear shown in the frontispiece is traced from a photographic illustration which appeared in the Westminster Budget some time ago. By the merest accident it is suggestive of a subject almost ready for the carver's hand.

Studies from Nature—Birds and Beasts

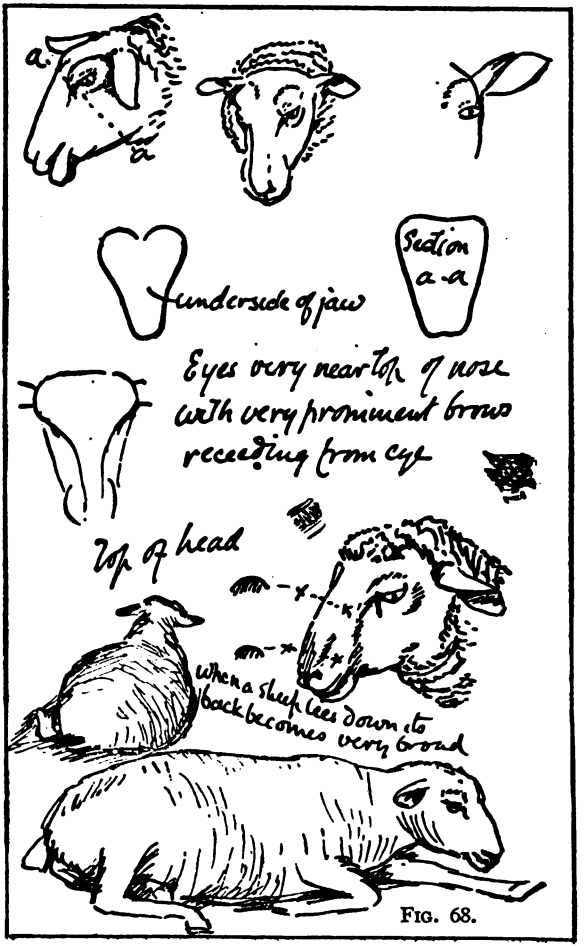

a
a
underside of jaw
Section a-a
Eyes very near top of nose with very prominent brows receding from eye
Top of head
when a sheep lies down its back becomes very broad

FIG. 68.

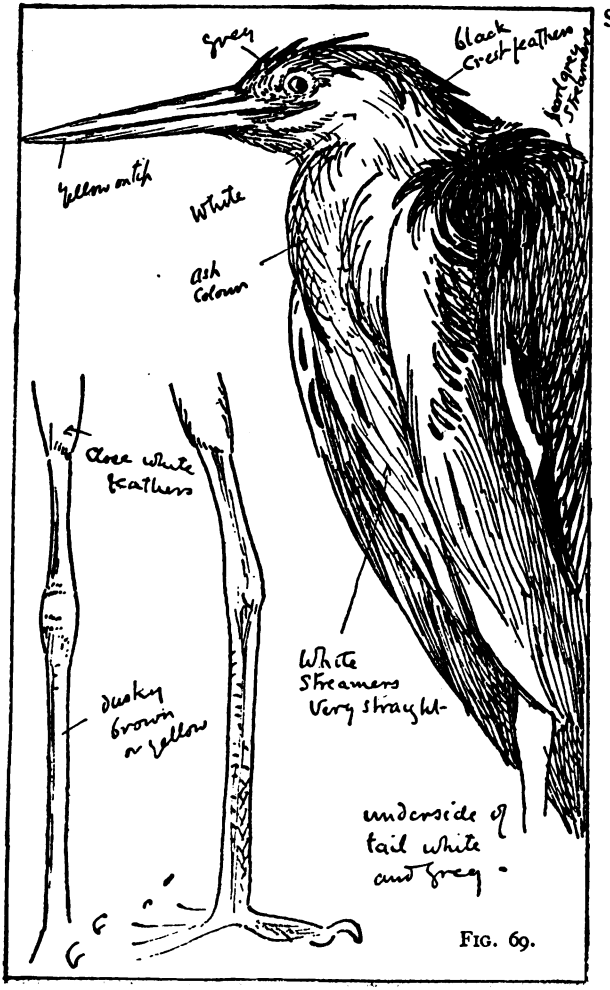

grey
black Crest feathers
Yellow with
White
Ash Colour
Close white feathers
White Streamers Very straight
dusky brown or yellow
underside of tail white and grey

FIG. 69.

Studies from Nature—Birds and Beasts

Until tourists began to explore the beauties of Switzerland, there were no better carvers of animals than the serious but genial craftsmen of that noble country, more especially of such animals as were familiar to their eyes. This pre-eminence shows distinct signs of soon becoming a thing of the past in the endeavors to meet the demands created by thoughtless visitors. Still, it is possible to obtain a little of the traditional work, uninfluenced by that fatal impetus originating in modern commerce. A piece of this kind is shown in Fig. 70, bought by a friend only a year or two ago in the Grindelwald, and which, although forming part of the usual stock of such things made for tourist consumption, was picked out with judicious discrimination from a number of stupid and trivial objects which displayed neither interest of design nor other than mechanical skill of carving. This little bear, a few inches in size, is carved in a way which shows long experience of the subject, and great familiarity with the animal's ways. The tooling of the hair is done with the most extraordinary skill, and without the waste of a single touch. Now, a word or two more on studies from the life

before we leave this subject. I have given you examples of diagrams made for this purpose, but much may be done without any drawings, further than a preliminary map of the general masses. In the case of such an animal as the horse, which can

FIG. 70.

be seen in every street, I have myself found it useful to follow them in my walks, taking mental note of such details as I happened to be engaged upon, such as its legs and joints, its head or neck; another day I would confine my attention to eyes, ears, mane, etc., always with reference to

the work immediately in hand, as that is the time to get the best results from life study; because the difficulties have presented themselves, and one knows exactly what to look for. Five minutes spent thus after the work has been started (provided the start has been right and involves no mistake in the general masses) is more valuable than hours of labor in making preliminary drawings.

The use of experimental models in clay or wax has, of course, its advantages, but it will be well to know just how far such an aid is valuable, and at what point its use becomes hurtful to one's work. It is a common practise in large carving shops for one man to design the figure or animal subjects in clay, while another carves them in stone or wood. Now, apart from the difference in material and the unnatural "division of labor," which we have discussed before, it is beyond question that a model of this kind has even a more paralyzing effect on the actual carver than a drawing would have. Of course, the work is more certain to reach a recognized standard, and the risk of total failure is reduced to a minimum, but there is literally nothing left for the carver

to invent; who, if he is a man with a turn for that kind of thing, and of a nervous temperament, must suffer untold irritation in its execution. The good and bad results of the use of a modeled pattern attend in a modified degree even where both are done by the same hand, but for all that it is a useful and convenient way of making experiments in doubtful passages of the work. The "how far" a model is to be carried must be regulated by the amount of confidence the carver has in his own foresight, but in any case it is always well to remember the difference of treatment required in plaster, clay, and hard wood, which lead to such different results that often fresh difficulty arises in having to translate the one manner into the other. For the purpose of roughing out the general scheme, the clay, if it must be resorted to, should be used in soft masses, then a drawing in outline made from this; but all doubtful detailed work should be carved, not modeled, and for this purpose the clay should be allowed to harden until it is nearly dry.

The opinions of the well-known wood-carver, Mr. W. Aumonier, on this subject, will be of value to you; he says with

regard to the best method of going to work: "A fresh piece of wood-carving executed without a model is distinctly a created work," and that much good work may come by "chopping boldly at a block without any preconceived design, but designing as you go on." But he thinks it is best to work from drawings; "rough, full-size charcoal cartoons, which give the effect wanted by their light and shade." He also says that he "strongly protests against the too frequent use of clay or plaster models, because they are often worse than useless, and not infrequently absolutely immoral in their tendency, because they absorb time and money, which ought more legitimately to be spent on the carving itself."

CHAPTER XXI

FORESHORTENING AS APPLIED TO WORK IN RELIEF

Intelligible Background Outline Better than Confused Foreshortening—Superposition of Masses.

Foreshortening as Applied to Work in Relief

I HAVE spoken of the necessity for careful balance between the outlines of subject and background: that both should be agreeable in shape. This becomes complicated and more difficult to arrange when we admit into our design anything resembling what painters call foreshortening, and the awkwardness is felt even in the placing of such a small thing as an apple-leaf, which may be treated in such a way that the intention of the drawing is entirely lost in the confusion which arises between the inferred and the actual projection.

In designing such subjects it will be good to bear in mind as a guiding principle that no matter what excuse there may be in the nature of the inferred position of the leaf or limb, the outline

Foreshortening as Applied to Work in Relief

against the background must be at once agreeable and explanatory.

Every kind of work in relief develops a species of compromise in the expression of form, lying somewhere between the representation of an object on a perfectly flat ground, as in a painting, and the complete realization of the same form, copied from nature in some solid material, without any background whatever. In proportion to the amount of actual projection from the background, of course the necessity diminishes for that kind of foreshortening which is obtained by delineation. It might be inferred, therefore, that in very low relief—which is more nearly akin to the nature of a picture—more liberty may be taken in this direction. It is not so, however, for where actual depth or projection exists, as in carving, be it only so much as the depth of a line, it makes foreshortening well-nigh impossible, except to a very limited extent. There must be, of course, *some* appearance of this quality, so a certain conventional standard has been set up, beyond which one only ventures at one's own risk. Thus, care is taken that every object composing the subject lies with its *longest lines* parallel

to the background. In this way the least possible violence is done to the imagination

Foreshortening as Applied to Work in Relief

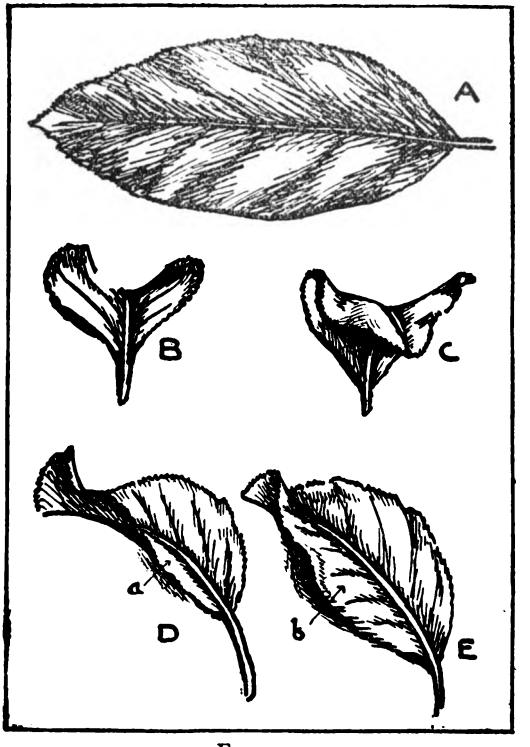


FIG. 71.

in completing the picture. As an example, no single leaf should be represented in

Foreshortening as Applied to Work in Relief

relief as turning or coming forward more than it would do if plucked from the tree and laid loosely down upon a sheet of paper. A, Fig. 71, is an outline of an apple-leaf pressed out flat. B is an attempt to present it in violent foreshortening, showing its back to the spectator, while its point is supposed to be buried in the background. C is the same leaf turned the other way, and supposed to be projecting forward; both are exceedingly awkward and unintelligible as mere outlines, and if expressed in relief would not be any more convincing as portraits of the thing intended—rather less so, in fact, than the diagram, which has no projection to interfere with the drawing. So we must turn our leaf until it presents its long side more or less to the spectator, as in D; but even here part of the edge is so thin at *a* that it will be better to turn it a little farther, as in E, showing more of its surface, as at *b*.

Again, if we take as another example two apples, one partly covering the other, as in *a*, Fig. 72, where one apple is supposed to be behind the other, and so implies distance. There is no means of expressing this distance in carving.

Lowering the surface of the hindmost apple would merely throw out the balance of masses without giving a satisfactory explanation of its position, while to cut a deep groove between the two would be an equally unsightly expedient. The difficulty should, whenever it is possible, be avoided by partially separating the two forms, as in *b*, where the center of the hindmost apple clears the outline of the

Foreshortening as Applied to Work in Relief

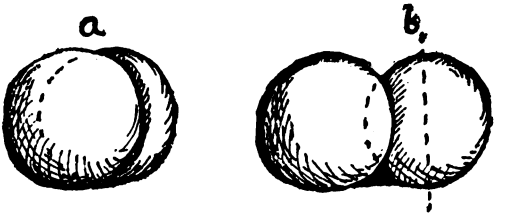


FIG. 72.

other; thus making it possible to get a division without awkwardness.

A good expedient, where leaf or scroll forms are to be carved, and when very truthful drawing is necessary to explain their convolutions, is that adopted by Professor Lethaby at the Royal College of Art. It consists in cutting the leaf out of a piece of stiffish paper, and with a knife or pen-handle curling it into the required

Foreshortening as Applied to Work in Relief

form. The main lines will thus be seen in true relation to one another, and all the distortion avoided which arises from disconnection of parts; not only that, but it is a useful aid to the invention, as much variety can be hinted at by a skilful manipulation in curling its lobes. Fig. 73 was drawn from a paper model of this kind. Of course, it is quite without

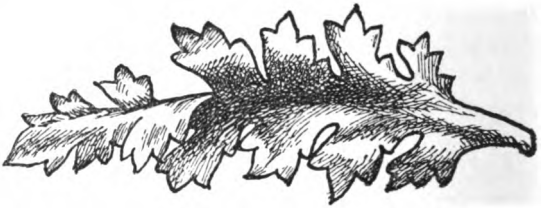


DIAGRAM OF LEAF DRAWN FROM A CURLED PAPER PATTERN.
FIG. 73.

the necessary veins or minor articulations, but is useful as a suggestion of main lines. With regard to subjects containing figures of men or animals, the same principle governs the placing of the whole body in the first instance, then of the different members, so that heads, arms, and legs take up a position as nearly as may be with a piece of background all to themselves. Thus, no two bodies should be super-

imposed if it can be in any way avoided. (I am speaking now of moderate and low relief, although even in high relief the best masters have always respected the principle.) The temptation to imitate effects of foreshortening for its own sake is not without some excuse, as it is quite possible to make presentable pictures in this way. A horse, for instance, may be carved in low relief, presenting either its head or hindquarters to the spectator, and yet not look absolutely absurd. Again, a front face may be carved in the same way, notwithstanding the difficulty presented by the projection of the nose. Neither of these experiments can ever be said to prove entirely successful. It is not so much that they are either difficult or impossible, as that a more suitable method, one more natural to the technique of the carver, is being neglected, and its many good qualities sacrificed for sake of an effect which can never be fully realized in sculpture. To so dispose the various masses, great and small, that they fall easily into groups, each having some relation to, and share of the background, is a true carver's artifice. A skilful use of this arrangement makes it quite unnecessary to encroach upon the

Foreshortening as Applied to Work in Relief

Foreshortening as Applied to Work in Relief

domain of another art in the imitation of an effect which may be successfully rendered with the pencil, but only so to a very limited extent with the carving tools.

You have all seen the actors, when called before the curtain at the close of the play, how they pass before it one by one, and perhaps joining hands make their bows *in line,* to all appearance, on a very narrow platform. The curtain is your background, while the footlights may stand for the surface of your wood. In illustration of this principle, let me call your attention to the arrangement of the animals in Plate VI, where economy of space, and a desire to display each detail to advantage, are the leading motives. I give it as the readiest example to hand, and because it fairly illustrates the principle in question. You must excuse the apparent vanity in making choice of one of my own works to exemplify a canon of art. The sheep at the top is supposed to be scampering over rocks; the ram below may be any distance from the sheep that you choose to imagine—the only indication of relative position is *separation,* by means of a ridge that may pass for a rock. The head of the ram is somewhat foreshortened, but there was enough thick-

ness of wood contained in the big mass of the body to allow of this being done in the smaller mass of the head, without leaving too much to be supposed. The heads of the sheep in the fold have been as closely packed as was consistent with showing as much of each as possible, as it was considered better to give the whole head and no body than to show only a part of both: most of the bodies, therefore, are supposed to be hidden behind the wall, only one showing in part.

Foreshortening as Applied to Work in Relief

It is a general axiom of the craft, that every mass (be it body or leaf) must be made as complete in itself as the circumstances will allow; but, if partly hidden, the concealment should be wilful, and without ambiguity. Thus, a dog's head may be rightly carved as being partly hidden in a bucket, but ought not to be covered by another head if it is possible to avoid it.

CHAPTER XXII

UNDERCUTTING AND "BUILT-UP" WORK

Undercutting as a Means and as an End; its Use and Abuse—"Built-up" Work—"Planted" Work—"Pierced" Work.

Undercutting and "Built-up" Work

BY undercutting is meant the cutting away of the solid portions of projections in such a manner as to make them invisible, thus throwing the carved surface work into more complete relief by detaching it from the background. This device has often been carried so far, where the projection was sufficient, that entire groups of figures and foliage have been practically detached from the background, like pieces of separate sculpture carved all round. This desire for completeness of relief was more or less a departure from the orthodox aims of the carvers' craft, and led ultimately to what is known as "built-up" work—that is to say, work in which the projecting parts were composed of many different pieces of wood, each carved separately, and afterward glued or pinned together to form the composition. Many

of the most elaborate carvings by Grinling Gibbons are of this kind; they have a charm of their own, but it is one of quite separate interest, and belongs to a category entirely removed from the art of carving objects in a solid piece of wood. Apart from this distinction, the difficulty of the method requires the most accomplished mechanical skill and a highly trained eye to either carve or compose such work in a way to command respect. I shall therefore dismiss this branch of the subject as being outside of our present limits.

Undercutting and "Built-up" Work

Undercutting, on the other hand, is an expedient distinctly characteristic of solid wood-carving, and some experiments ought to be made by you in designing work in which it can be used. It may be either partial or complete—complete, of course, only up to a point; that is to say, the connection with the background must in every case be not only maintained but visibly demonstrated. Partial undercutting applies to such portions as the sides of leaves, the receding parts of heads, wings, etc., where the wood between the object and its background is cut away on an inward bend, either completing the

Undercutting and "Built-up" Work

projecting form, as in the case of a head, or merely to hide the superfluous wood in the case of a leaf. All this presupposes a certain amount of elevation in the relief; indeed, it is only in such cases that the process is necessary or can be carried out. The use of undercutting of this kind is like every other technical process, liable to abuse through too much being made of its effects. Fortunately the time it consumes is a safeguard against any tendency to run riot in this direction. The point at which it should in all cases stop, and that relentlessly, is where it begins to cause a separation between any entire mass of ornament and its background. If *portions* are thus relieved almost to complete detachment, but visibly reconnect themselves in another place, a certain piquancy is gained which adds charm without destroying character. A curious use is made of undercutting in the bunch of leaves given in Plate XI from a Miserere seat in Winchester Cathedral; it may be said to be completely undercut in so far that the whole bunch is hollowed out under the surface, leaving from $\frac{1}{4}$ to $\frac{1}{2}$ in. thickness of wood, in which the leaves are carved, so that you may put your finger

in at one hole and see it at the bottom of another. The only end all this extra labor seems to have attained is that of changefulness in the shadows of the holes between the leaves, in which one sees dark rims with light at the bottom, a condition which certainly adds a mysterious lightness to the whole mass. It is a very refined and appropriate use of undercutting, but would only be possible where time could be spent to secure a variant of such epicurean delicacy, as all the superfluous wood must be taken out through the spaces between the leaves, and in this case they are not overlarge for that purpose.

Undercutting and "Built up" Work

Work which has its background entirely cut away, and which is afterward glued or "planted" on a fresh background to save labor, can not be called "undercut"; this method has generally a cheap look, as it is used with the object of saving time and expense. Carving which is treated in this way, but instead of being "planted" close to the background, is fixed at a little distance from it (as is the case with the lace-like designs fitted into the hollow mouldings of fifteenth-century choir-screens), is of quite a different order, although even in

Undercutting and "Built up" Work

this case it can not be strictly described as undercut: it is more nearly akin to pierced fretwork. It has, however, all the general effect of undercut work, and is the only possible way of obtaining this effect in wood where a large quantity of such ornament is required. The face of such carving is generally a little convex, while the back is hollowed out to give an equal thickness of section. The ornaments in Figs. 75, 76, and 77 are of this description, and are calculated to give great play of light and shade, and be seen well at a considerable distance.

Undercutting in the strict and more laborious sense must be reserved for occasions where the labor is repaid by the additional charm. It must be considered in the light of a *tour de force,* which, on account of its cost in the matter of time, should only be used under exceptional circumstances, care being taken to make it clear that it *is an exception* to the general rule of solid carving on a solid background.

CHAPTER XXIII

PICTURE SUBJECTS AND PERSPECTIVE

The Limitations of an Art not Safely Transgressed—Aerial Perspective Impossible in Relief—Linear Perspective only Possible in a Limited Way.

Picture Subjects and Perspective

THOSE vague and shadowy boundaries which separate the domains of the different arts are being perpetually called in question. By what landmarks such indefinite frontiers may be distinguished, and how far they may be extended or transgressed, will always be a matter of dispute. Excursions of conquest are continually being made, and conspicuous among these, one which animates the hopes of many sculptors and modelers. Its aim is the appropriation of those charms which are the peculiar property of the graphic arts, more especially their power of expressing the effects of distance by means of linear and aerial perspective.

The background of a piece of carving is so obviously solid and impenetrable that any attempt to imitate an appearance of distance is sure to defeat its own ends, the

Picture Subjects and Perspective

loss being greater than the gain. If there are limits to be observed in the foreshortening of a single leaf, how much more must they apply to the representation of whole landscapes? Properly speaking, there is no *distance* available in the carver's art; its whole interest lies near the surface, and in the direct rays of the light which illuminates it. There is even a distinct pleasure to be derived from the sense that it is all carved out of a block of such and such thickness, pointing to the reasonable conclusion that this thickness should never be lost sight of, the carving ever and anon returning to the surface as a measure of music does to its key-note. This is exemplified in all the great works of antiquity, among which the Parthenon frieze may be quoted as evidence. On the other hand, all pictorial sculpture, such as carved landscapes with figures diminishing both in scale and projection, necessarily fail to uphold this sense of solidity, as there must occur large spaces which are hollowed out far below the surface to give another plane on which to carve the more distant objects in low relief, in the vain hope of making them appear to recede. Work in which per-

spective of this kind is used must be viewed as nearly as possible from the point of vision produced by its vanishing-lines; this point is intelligible enough in the case of a painting, but when it comes to be carved into relief, if it happens to be seen from any other point of view, it necessarily looks all wrong, because every part is thrown into false relationship.

All this, of course, forms no argument against the use of explanatory landscapes with trees, buildings, etc. It only means that all such features must be treated in a way entirely different to that adopted by the painter—that is to say, in detached groups, each having some due relation to the original surface of the wood, and only very little to their perspective positions. In Fig. 74 are two diagrams of a landscape composition. The one is appropriate to a painted picture and the other to carving; both have pretty nearly the same number of features, except that in the carving there is no *effect* of distance attempted, whereas in the painting everything leads to this one particular distinction. The road goes *into* the picture, the bridge is seen end on, the house and mill are diminished in size, and

FIG. 74.

the horizon is strongly enforced by a shadow echoed in the sky. The carving looks ridiculous beside the painting, but it is a severe test, as it is not a subject which should be carved at all in that condensed way.

Picture Subjects and Perspective

CHAPTER XXIV

ARCHITECTURAL CARVING

The Necessity for Variety in Study—A Carver's View of the Study of Architecture; Inseparable from a Study of his own Craft—Importance of the Carpenter's Stimulating Influence upon the Carver—Carpenter's Imitation of Stone Construction Carried too Far.

THAT the study of wood-carving should be confined to the narrow field of its own performances would be the surest way to bring contempt upon an art which already offers too many temptations for the easy embodiment of puerile motives. Such a limited range would exclude all the stimulating lessons to be derived from the many other kinds of carving and sculpture; forgetful that they are, after all, but different forms of the same art, differing only in technique and application. It would take no note of the stately sculptures of

Architectural Carving

Architectural Carving

Greece—the fountain-head of all that is technically and artistically perfect in expression of form—or of the splendor of imagination displayed in the ivories of Italy. Many another source of inspiring impetus would be neglected, including the greatest of all, the influence of architecture, and through it, the dignified association of the carver's art with all that is noble in the life of mankind.

The dry and uninviting aspect which a serious study of architecture presents to some minds is such that it is too often avoided as both useless and wearisome. Much of this diffidence is due to a misconception of the aims which should govern the student of decorative design in making an acquaintance with its principles. The study should not be looked upon as pertaining exclusively to the functions of an architect, nor as having only an accidental connection with particular crafts. It must be remembered that in the old days mason and carpenter were both craftsmen and architects, and the sculptor and wood-carver had an equal share in creating every feature which gives any distinction of style to the buildings that were the outcome of their united efforts. So, in-

stead of looking upon the subject as only a study of dates for the antiquary, and rules of construction for the architect, the carver should take his own view, and regard architecture for the time being as what in some sense it really is: a very large kind of carving, which includes and gives reason for his own particular branch. The importance of the subject is proved by the experience of centuries; history showing plainly how the two arts grew in strength and beauty only when closely associated, and shared each other's fate in proportion to their estrangement.

In this place I can say but very little upon such a vast subject; all I can do is to call your attention to one or two examples of carved work combined with structural carpentry, in order that you may see for yourselves what a power of effect lies in that union, and how by contrast it enhances the value and interest of both. I do this in the hope that it may possibly lead you to a more complete study of architecture, for which there is no lack of opportunity in books and museums, but more especially in what remains of the old buildings themselves, with which a familiar and personal acquaintance will be much

better than a theoretical or second-hand one.

No carver with a healthy ambition can long continue to make designs and produce them in wood without feeling intensely the want of some architectural occasion for his efforts. Had he only a barge-board to carve, or the canopy of a porch, it would be such a relief to turn to its large and general treatment after a course of the panels and ornaments peculiar to domestic furniture. Look, for instance, at the carved beams of the aisle roof in Mildenhall Church given in Plate III, and think what a fund of powerful suggestion lay in the bare timbers before they were embellished by the carver with lion, dragon, and knight. Even the carpenter became inspired with a desire to make something ornamental of his own department, and has shaped and carved (literally carved) his timbers into graceful moldings. Then, again, in the roof of Sall Church, Norfolk, shown in Plate IV, you have a noble piece of carpentry which is as much the work of an artist as the carved figures and tracery which adorn it —indeed it is all just as truly carved work as those figures, being chopped out

of the solid oak with larger tools, ax and adze, so that one knows not which to admire most, carved angels or carved carpentry.

Plates XI and XII are details of the carvings which fill the spandrels of arch and gable in the choir stalls and screen at Winchester Cathedral. There are a great many of these panels similar in character but differing in design, some having figures, birds, or dragons worked among the foliage. They are comparatively shallow in relief, and this appears less than it really is owing to the fact that many parts of the carving dip down almost to the background, giving definite but not deep shadows. The main intention seems to have been to allow only enough shadow to secure the pattern, and then to emphasize this by means of a multitude of little *illuminated* masses. The leading lines run through the pattern as continuously as possible, but the surface of the leafage is divided up into numbers of little hills and hollows. The sides of these prominences catch and reflect light more readily than they produce shadow, so that it is possible to trace the pattern at a considerable distance by means of the lights alone. Un-

fortunately for all believers in the historical evidence of ancient handicrafts, this work was overhauled some half century ago, and in parts "*restored.*" The old work has been imitated in the new with surprising cleverness, but for that, no one who has a clear sense of the true function of the carver's art, or of the historical value of its witness to past modes of life, will thank those who carried out the "restoration," so confusing is it to be unable to distinguish at a glance the old from the new, so depressing to find such laborious efforts wasted in pleasing a childish desire for uniformity of treatment when it could only be achieved at the cost of deception, and, I may add, so irritating to find oneself for a moment deceived into accepting one of the "restored" parts as genuine old work. To add to the deception, the whole of the old woodwork, as well as the new, was smeared over with a black stain in order the better to hide the difference of color in old and new wood, thus forever destroying its soft and natural color, as well as the texture of its surface, so dear to the wood-carver.

The fifteenth century in England was a period of great activity among wood-

carvers, and many beautiful choir-screens were added about this time to the existing churches, all in the traditional Gothic manner, as the Renaissance influence was a full century at work in other countries before its power began seriously to affect the national style. The West of England

Architectural Carving

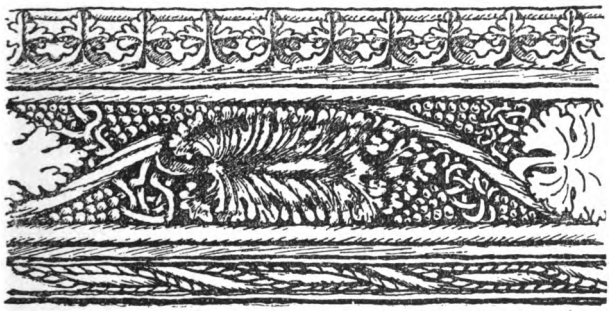


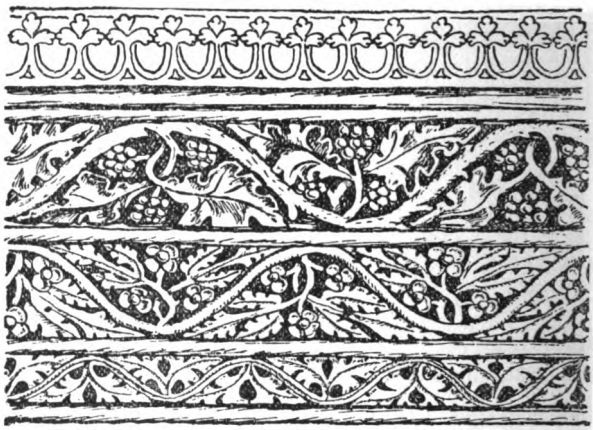
Fig. 75.

(Somerset and Devon in particular) is rich in the remains of this late Gothic carving, some details of which are shown in the accompanying illustrations, Figs. 75, 76, 77.

As a general rule the supporting carpentry of these screens bears a strong

Architectural Carving

resemblance to stonework; so imitative is it in treatment, that it is only by the texture of the wood and its lightness of construction that the distinction is made evident. Now a certain degree of modi-



COMBINATION OF REPEATING CURVES OF SIMILAR CHARACTER BUT VARIED IN SIZE - FIFTEENTH CENTURY WORK.

FIG. 76.

fied imitation, where one craft models its forms of design upon those of another, using a different material, as in the case of woodwork imitations of arches, tracery, etc., is not only legitimate, but very

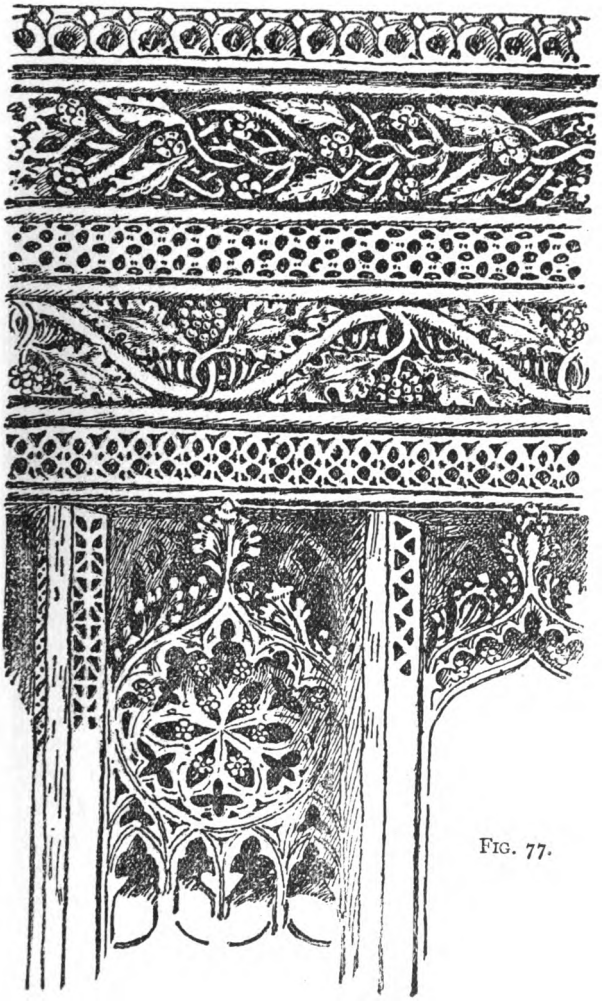


Fig. 77.

Architectural Carving

pleasing in its results. To attain this end, the carpenter need only be true to his own ideals—there is no occasion to abandon the methods of his own craft in order to copy the construction which is peculiar to another. The resources of carpentry offer an infinite field for the invention of new and characteristic forms, and these may be made all the more attractive if they show, to some extent, the influence of an associated craft, but never fail to become wearisome if essential character has been sacrified for the sake of an ingenious imitation. The structural parts of some of these screens are composed of elaborate imitations of stone vaulting and tracery, so closely copied as to be almost deceiving, therefore they can not be taken as good examples of suggestive opportunity for the wood-carver.

The carved work, on the other hand, is marked by a strong craft character, essentially *woody* both in design and execution. The illustrations referred to are typical examples of this kind of work, and, although the execution can not be indicated, they at least give the disposition of parts, and some idea of the contrast obtained by

the use of alternate bands of ornament differing in scale, or, as in some cases, the agreeable monotony produced by a repetition of almost similar designs, varied slightly in execution.

Another prominent feature of church woodwork, which developed about this time into magnificent proportions, was the font cover and canopy. Many of these were, however, more like glorifications of the carpenter's genius for construction than examples of the carver's art, as they were composed of a multitude of tiny pinnacles and niches, the carver's work being confined to a repetition of endless crockets, tracery, and separate figures or groups. However, in Plate XIII an example is given of what they could do when working together on a more equal footing; although much mutilated, enough remains to show how the one craft gains by being associated with the other in a wholesome spirit of rivalry.

CHAPTER XXV

SURFACE FINISH—TEXTURE

Tool Marks, the Importance of their Direction—The Woody Texture Dependent upon Clearness of Cutting and Sympathetic Handling.

Surface Finish—Texture

THE term " texture " is sometimes applied to the quality of finish which is characteristic of good carving; it has a somewhat misleading sound, which seems to suggest that the final treatment of the surface is the work of a separate operation. However, it is a right enough word, as the texture which wood-carvers aim at is that of the wood in which they are carving. One might naturally think that this texture must necessarily appear when the work was finished, but that is not the case, as it is only rescued by the most skilful use of the tools, and easily disappears under the mismanagement of clumsy or unsympathetic hands.

Texture in carving is in some respects on a parallel with tone in painting—it depends upon a right relation of many qualities. As in the painting good tone

is the outcome of the combined effects of truth in color and a right balance of what are called the " values," together with decision in the handling of the brush, so in carving, texture depends upon, first, having a clear idea of what is being carved, and making it clear to others; that if it be round, hollow, or flat, it must be so indeed; that edges and sharpnesses be really where they were intended to be, and not lost in woolly confusion. Then again, as with the painter's brush, the tool must be moved by a hand which adapts itself to every changing plane, to all manner of curves and contours, with touches sometimes delicate and deliberate, at others broad and sweeping, or even, at times, brought down with the weight and force of an ax-blow.

Surface Finish-Texture

A good quality of finish may exist in the most divergent kinds of work, each having its own characteristic texture. Thus a broad treatment on a large scale will make much of the natural texture of the wood, enforcing it by crisp edges and subtle little ridges which catch the light and recall the momentary passage of the sharp tool, while elaborate work in low relief may have a delicate texture which partly imitates that of the details

Surface Finish—Texture

of its subject, and partly displays the nature of the wood. In either case, the texture must be consciously aimed at by the carver as the last but by no means least quality which is to give vitality to the work of his hands. A sense of the capabilities of his wood in this respect is one of the best aids to the carver, as it reacts on his sense of form and compels him to precision.

Manual dexterity alone may succeed in making its work clearly intelligible, but that is all, and it generally leaves a surface in which there is little indication of any feeling for the material in which the work is carved, nothing, in fact, that marks it specially as carving in wood, or distinguishes it from a casting in metal.

The technical operation which is most immediately answerable for the making or marring of texture is the disposition and nature of the final tool marks. These should be so managed that they help the eye to understand the forms. They should explain rather than confuse the contours of the surface. Just as in a good chalk drawing the strokes and cross-hatchings are put in with method, and if well done

produce the effect of something solid, so in carving, the tool marks should emphasize the drawing without in any way calling attention to themselves.

It is quite impossible to explain in words that will not be open to misconstruction the subtle commingling of qualities which make all the difference between good and bad texture. We may succeed better by describing those conditions which are unfavorable to it. Thus work which is very much cut up into minute detail, and which lacks a proper contrast of surface, or, for the same reason, work which is too generally bald and smooth, rarely exhibit a good surface texture. Again, work which is overlabored, or where delicate details have been attempted on a coarse-grained wood, or finally, work which, although done with success in the matter of mechanical dexterity, is deficient in feeling for its woody possibilities, are all likely to fail in the matter of texture.

Punch-marked backgrounds have undoubtedly a legitimate place among the expedients of the carver for obtaining contrast, but on the whole, as such, they are of a somewhat meretricious order, and

Surface Finish—Texture

in almost every case their use is fatal to the charm of fine texture, as this always depends on an appreciation of the homogeneous connection of carving and background. If they are used at all they should be made to form patterns on the background, and not put down promiscuously. Little gouge marks are still better, as they are not so mechanical.

I shall conclude this part of my subject with a quotation from the words of Mr. W. Aumonier, in a lecture delivered at the Royal Institute of British Architects.

"*All carving to be treated according to the position it is to occupy.* Not only the design, but the actual carving itself, should be considered with a view to the position it is to take and the light it will receive. Thus, even if quite close to the eye, where, of course, its position warrants or demands a certain amount of finish, it must be remembered that real finish rather means perfection of form than smoothness of surface, so that even there it should still show its cuts and its tool marks fearlessly, and be deepened in parts to make it tell its proper tale in the combined scheme of decoration; while if it is going a great height or distance from the eye it should

be left as rough as ever you can leave it. The only points that have to be regarded are the outlines, varieties of planes, and depths, and if these be properly considered everything else will take care of itself, and then the whole work can not be left too rough. Its very roughness and choppy cuts will give it a softness and quality when in its place that no amount of smoothing or high finish can possibly attain to."

Surface Finish—Texture

Beware of putting a wrong interpretation upon the word "rough"—refer to what he says of the points to be regarded, i.e., the "varieties of planes, and depths." If they are right the "roughness" is not likely to be of the offensive kind.

Nothing so effectually destroys the quality of texture as polish applied to carving. If furniture *must* be polished it should not be carved. The only polish that improves carving is that which comes of use. On hard woods, such as oak or Italian walnut, the pressure of the tools leaves a pleasant polish, which is all that is necessary; the *most* that should be allowed may be given by a little burnishing with the handle of the tool.

CHAPTER XXVI

CRAFT SCHOOLS, PAST AND PRESENT

The Country Craftsman of Old Times—A Colony of Craftsmen in Busy Intercourse—The Modern Craftsman's Difficulties: Embarrassing Variety of Choice.

Craft Schools, Past and Present

THE present revival of interest in the arts, especially with regard to those of a decorative kind, is based on the recently awakened esthetic desires of a small section of the general public, who owe their activity in this direction to the influence of men like John Ruskin and William Morris. The first of these, by his magic insight, discerned the true source of vitality which lay in the traditions of medieval workmanship, i.e., their intensely *human* character and origin. His fiery words compelled attention, and awakened a new enthusiasm for all that betokens the direct and inspiring influence of nature. They raised the hope that this passion might in some way provide a clue to the recovery of a fitting form of expression.

William Morris, with no less power as a

craftsman, was the first to give practical embodiment to this newly awakened impulse by a modified return to the older methods of production. His rare knowledge of medieval history, and manly sympathy with all that is generous in modern life, made it impossible for him to become a superficial imitator. His work is an example of what may be achieved by a union of high artistic instincts with a clear understanding of the conditions of modern life.

Craft Schools, Past and Present

Cheering as is the present activity in its encouragement of endeavor, the difficulties of establishing anything like an efficient system of education for the artist, more especially the sculptor, or carver artist, is only being gradually realized. The difficulties are not so much academic as practical. It is less a question of where to study than one of knowing what direction those studies should take. Before any genuine development in the art can be looked for, continuity of effort must be established, and that in a single direction, undisturbed as it is at present by differences of public taste.

Opportunities for study are now afforded to an extent never before dreamed of: in

books and schools, and in museums; but division of opinion mars the authority of the two first, while the last is confessedly but a kind of catalogue, which may only be read with profit by the light of considerable experience.

A certain amount of success has undoubtedly attended the progress of the new system, but it must always be more or less at a disadvantage; firstly, by reason of its divided aims; secondly, because the system is more theoretic than practical, and is often based on the false assumption that "design" may be learned without attaining a mastery over technique, and *vice versa.*

Until students become disillusioned on this latter point, and are at the same time permitted to follow their natural bent with as little interference as possible from the exigencies of public taste, uniformity of aim will be impossible, and consequently the system must remain artificial. It can never, under any circumstances, entirely replace that more natural one adopted by our ancestors. How can its methods compare for a moment with the spontaneous and hearty interest that guided the tools of those more happily placed craftsmen,

whose subjects lay around them, of daily familiarity; whose artistic language was ready to hand and without confusion, affording an endless variety of expression to every new and individual fancy. Many of these craftsmen were, owing to their invigorating surroundings, gifted with a high poetic feeling for their art—a quality which gives to their work a transcendent value that no learning or manual cleverness could supply. They acquired their technical knowledge in genial connection with equally gifted members of other crafts, and in consequence expressed themselves with corresponding and justly proportioned skill in execution.

Conditions that can not be altered must be endured while they last, but the first step toward their improvement must be made in gaining a knowledge of the facts as they are. This will be the surest foundation upon which to build all individual effort in the future.

Who that has felt the embarrassing doubts and contradictory impulses, peculiar to modern study, can have failed to look disconsolately away from his own surroundings to those far-off times when craft knowledge was acquired under cir-

cumstances calculated to awaken the brightest instincts of the artist? The imaginary picture calls up the ancient carver at his bench, cheerfully blocking out images of leaves and animals in his busy workshop, surrounded with the sights and sounds of country life. His open door frames a picture of the village street, alive with scenes of neighborly interest. From the mill-wheel comes a montonous music making pleasant cadence to his own woody notes, or the blacksmith's hammer rings his cheery counterpart in their companionable duet.

Short as is the distance between workshop and home, it provides a world of beauty and incident; suggesting to his inventive mind the subjects suitable for his work. Birds, beasts, and flowers are as familiar to him as the tools with which he works, or the scent and touch of the solid oak he handles daily. There, among the aromatic chips, he spends the long working hours of a summer day; varied by the occasional visits of a rather exacting Father from the neighboring monastery; or perhaps some idle and gossiping acquaintance who looks in to hold a long parley with his hand upon the latch.

Or it may be that the mind turns to another carver, at work in one of the many large colonies of craftsmen which sprang up amid the forest of scaffolding surrounding the slow and mysterious growth of some noble cathedral. Here all is organized activity—the best men to be found in the country have been banded together and commissioned to do their best, for what seems, in modern eyes, a ridiculously small rate of pay. Some are well known and recommended; others, as traveling artists, are seeking change of experience and daily bread. Foreigners are here, from France, Italy, and the East. All have been placed under the direction of competent masters of their craft; men who have long since served their apprenticeship to its mysteries, and earned an honorable position in its gilds.

Craft Schools, Past and Present

Here the carver works in an atmosphere of exhilarating emulation. Stone-carver and wood-carver vie with each other in producing work that will do credit to their respective brotherhoods. Painter and decorator are busy giving to the work of their hands what must have appeared to those concerned an aspect

of heavenly beauty; the most precious materials not being considered too costly for use in its adornment.

What an interchange of artistic experience!—interchange between those of similar craft from different countries, and the stimulating or refining influence of one craft upon another—sculptors, goldsmiths, wood-carvers, and painters, all uniting in a sympathetic agreement to do their utmost for the high authorities who brought them together; with a common feeling of reverence, alike for the religious traditions which formed the motives of their work and the representatives of that religion in the persons of their employers.

What an endless variety of interruptions must have been common! all of a kind eminently calculated to stimulate the imagination. Municipal functions, religious festivals with their splendid gatherings and processions, the exciting events of political contest, often carried to the point of actual combat, to say nothing of the frequent Saint's day holidays, enjoyed by the craftsman in jovial social intercourse. All and every scene clothed in an outward dress of beauty,

ranging from the picturesque roughness of the village inn to the magnificent pageantry of a nobleman's display, or the majestic surroundings of an archiepiscopal reception.

From dreams of the past with its many-sided life and background of serious beauty, we turn with feelings almost bordering on despair to the possibilities of the present. Not only has the modern craftsman to master the technicalities of his business, but he must become student as well. No universally accepted form of his art offers him a ready-made language; he is left fatally free to choose style, period, or nationality, from examples of every conceivable kind of carving, in museums, photographs, and buildings. As proud but distracted heir to all, he may cultivate any one of them, from Chinese to the latest style of exhibition art. For his studies he must travel half a dozen miles before he can reach fields, trees, and animals in anything like inspiring conditions. He must find in books and photographs the botanical lineaments of foliage and flowers, of which he mainly seeks to know the wild life and free growth. With but

one short life allowed him in which to make his poor effort in a single direction, he must yet study the history of his craft, compare styles, and endeavor with all the help he can get to shape some course for himself. Can he be assured of selecting the right one, or out of the multitude of counselors and contradictory views, is there not a danger of taking a false step? No wonder, if in the cloudy obscurity of his doubts, he sometimes feels a tired desire to abandon the problem as too intricate to be resolved.

CHAPTER XXVII

ON THE IMPORTANCE OF COOPERATION BETWEEN BUILDER AND CARVER

The Infinite Multiplicity of Styles—The "Gothic" Influence: Sculpture an Integral Element in its Designs—The Approach of the so-called "Renaissance" Period—Disturbed Convictions—The Revival of the Classical Style—The Two Styles in Conflict for a Time; their Respective Characteristics Reviewed—Carvers Become Dependent upon Architects and Painters—The "Revival" Separates "Designer" and "Executant."

Cooperation between Builder and Carver

THE prevailing architectural fashion of a time or country, known as its style, has generally been determined by the influence of more advanced nations on those of a ruder constitution; each modifying the imported style to suit its own climatic and social conditions, and imbuing it with its own individual temperament. The foreign idea was thus developed into a distinct and national style, which in its turn bore fruit, and was passed on as an initiative for other nations and new styles.

Cooperation between Builder and Carver

The current of this influence, generally speaking, trended from east to west as though following the course of the sun, upon whose light it depended for the illumination of its beauties.

There are so many styles of architecture, and consequently of carving, both in wood and other materials, that a history of such a subject would be a life study in itself, and be quite barren of results except those of a professional kind. It would include the characteristics of carvings from every country under the sun, from the earliest times known. Engravings on boars' tusks found in prehistoric caves, carvings on South Sea Island canoe paddles, Peruvian monstrosities of terror, the refined barbarity of India and China, the enduring and monumental efforts of Egyptian art, and a hundred others, down to times and countries more within reach. In fact, it would only be another name for a history of mankind from the beginning of the world.

Nothing could be better for the student's purpose than to begin his studies of history at that point where the first indication of the Gothic or medieval period of architecture makes its appearance. For it was

from this great and revolutionary change in the manner of building that all the subsequent variety of style in carving as well as building in medieval Europe took its origin. The first rudiments of the great school of art, which has been broadly classified as having a "Gothic" origin, began to make their appearance in Byzantium some three or four centuries after the birth of Christ. This city, said to have been founded by a colony of Greek emigrants, became the seat of Roman government in their eastern empire, and is now known as Constantinople: it contains a noted example of ancient art in the great church of St. Sophia. From the date of the building of this church in the sixth century A. D. to the beginning of the fifteenth century in Italy, and about a hundred years later, more or less, according to distance from that center, we have roughly the period during which the "medieval" spirit ruled the arts of Europe.

Cooperation between Builder and Carver

The work of this long period is distinguished beyond all others by the varied beauty and interest of its carvings, a preeminence it owes in part to the strong bias in this direction which was given

Cooperation between Builder and Carver

by its early founders, but still more to the unbroken alliance maintained between builders and carvers throughout the entire period. An inherited talent for sculpture, handed down, no doubt, from their classical forefathers, distinctly marks the commencement of the era; but from that time until the appearance of the "Renaissance" influence, builder and carver are no longer conceivable as being independent of each other. Sculpture of one kind or another not only played an important part in the decoration of its buildings, but became a necessary and integral element in every architectural conception, be its importance little or great. The masons designed their structural features with a view to the embellishments to follow from the hand of the carver; they were in full sympathy with the artistic intention of the decoration, therefore their own ideas were in complete conformity with those of the sculptor, while even in some cases they did this part of the work themselves. The sculptors, restrained by the severe laws of structural design, never transgressed the due limits of their craft, or became insistent upon the individuality of

their own work. Hence, throughout all the successive changes of style brought about by time and difference of country, climate, or material, the art of carving steadily progressed hand in hand with the art of building. The changes were so very gradual, and grew so naturally from the conditions and requirements of social life, that ample time was allowed for the education of public feeling, which became in this way identified with the inventive progress of the craftsmen. As a happy result, one aim and desire governed alike builders, carvers, and people, and one style at a time, enjoyed and understood by all, was the wholesome regimen by which the architectural appetite of the period was sustained. Cathedral and cottage differed only in their relative grades of importance; each shared in due proportion the advantages of an architectural style common to all forms of building, and adaptable in the highest degree to every varying purpose of design, from the simplest piece of walling, with the barest indication of style, to the most elaborate arrangement of masonry and carving which could be devised to distinguish a stately and important structure.

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Time was, however, preparing a revolution which was destined to sweep away many old beliefs and established institutions, and with them those familiar motives and habits of thought, which had long formed the bountiful source of medieval inspiration and invention. The period between the beginning of the fifteenth century and the Reformation was like a fiery furnace, in which the materials for a new world were being prepared; it was no time for the leisurely enjoyment of the pleasures of art, which presupposes settled convictions and imperceptible developments.

About this time many new forms of intellectual activity began to engage the minds of the more gifted. Speculative philosophy, the opening fields of science, the imaginative literature of the ancients; these were among the subjects which, while they enlarged the sphere of individual thought, destroyed that social ideal which had its roots in a common belief, and with it, the secret source of all past development in architecture. With the deep-lying causes and far-reaching effects of the unrest which disturbed this period, we are not here concerned, beyond the point where it touches our interest in

architecture and sculpture. That drastic changes were in progress affecting the popular regard for these arts is undeniable. Educated and illiterate minds became alike indifferent to the authority of established religion—either they succumbed to the tyranny of its powerful but corrupt ministers, or stood out in open rebellion against its disputed dogmas. In either case, that architecture which had formerly been regarded as the chief symbol of united faith, shared the neglect of one section or the abhorrence of the other. That strong sense of beauty, once the common possession of builders, sculptors, and people, was now between the upper and nether millstones of fate, being ground into the fine dust which has served for centuries as the principal ingredient in the manufacture of an endless succession of moral puddings and pies, known in modern times as "art criticism."

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To earnest minds in all classes at that time, any enthusiasm for architectural styles, old or new, must have appeared as futile as an anxiety about appearances while one's house was burning.

To the art of this period the title

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"Renaissance" has been foolishly applied. When used in association with the arts of architecture and sculpture, it is essentially a misnomer. For these arts it was merely a time of revival, not in any sense one of rebirth, as the word implies. In no way can this period claim to have conferred vitality along with the resuscitation of outward form. The revival of a classical style in architectural design, which began in the early years of the fifteenth century, was the sequel to a similar "revival" in the study of Greek and Roman literature, then occupying the interests of cultivated scholars. It was but a step further to desire also the realization of those architectural splendors which were associated with these studies. Such dilettante dreams can not be supposed to have deeply interested the general public, with whose concerns they had but a remote connection; so under these circumstances, probably the classical style was as suitable as any other, chosen on such narrow and exclusive grounds. There was even a certain fitness in it, a capability of much expansion on theatrical and grandiose lines. Its unbending demeanor toward

craft talent of the humbler kind at once flattered the vanity of the cultured, and cowed uneducated minds.

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The Duomo at Florence was finished early in that century, and was one of the first buildings in which the new style was adopted. In this case it was used mainly in the completion of a building already well advanced on lines based upon the older traditions. The character of its design, although not of a strictly imitative kind, was distinctly based on a classical ideal. Imitations followed, mingling, as in the case of the Duomo, Gothic and classic elements, often with fine effect. It is quite possible to believe that, had this intermarriage of the two schools continued to bear fruit, some vertebrate style might have resulted from the union, partaking of the nature of both parents; but the hope was of short duration. Its architects, becoming enamored by the quality of scientific precision, which is the fundamental principle of classical design, soon abandoned all pretense of attempting to amalgamate the native and imported styles. They gave themselves up wholly to the congenial task of elaborating a scholarly system of imitation; so that,

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by the middle of the sixteenth century, no trace whatever remained of native feeling in the architecture of its important buildings.

During the progress of this revolution in style, the old medieval habits of cooperation between master mason and sculptor were slowly being exchanged for a complete dependence upon a special architect, who was not necessarily a craftsman himself; but whose designs must be carried out line for line with the most rigid adherence to measurements.

For a moment in history, the rival spirits of the two great schools of architecture stand face to face like opposing ideals. The classical one, recalled from the region of things past and forgotten, again to play a part on earth with at least the semblance of life; the Gothic spirit, under notice to quit and betake itself to that oblivion from which its rival is reemerging.

In the heyday of their power, the first had shown a distinctly autocratic bearing toward its workmen; offering to its sculptors of genius opportunities for the exercise of highly trained powers, and to the subordinate workmen only the

more or less mechanical task of repeating a limited number of prescribed forms. The other, a more genial spirit, had possessed the largest toleration for rude or untrained workmanship, provided that in its expression the carver had a meaning which would be generally understood and appreciated. If skill could be commanded, either of design or technique, it was welcomed; but it gave no encouragement to work which was either so distinctive as to be independent of its surroundings, or of a kind which could have no other than a mechanical interest in its execution. The abrupt contrasts, the variety and mystery, characteristic of Gothic architecture, had been a direct and irresistible invitation to the carver, and the freest playground for his fancy. The formality of the classical design, on the other hand, necessarily confined such carving as it permitted to particular lines and spaces, following a recognized rule; and except in the case of bas-relief figure subjects and detached statues, demanded no separate interest in the carvings themselves, further than the esthetic one of relieving such lines and spaces as were otherwise uncomfortably bare.

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Some modification of this extreme arrogance toward the decorative carver was only to be expected in the revived style, but the freedom allowed to the individual carver turned out to be more apparent than real. A new race of carvers sprang up, imbued with the principles of classical design; but being no longer in touch with natural and popular interests, nor stimulated by mutual cooperation with their brother craftsmen, the mason builders, they adopted the fashionable mode of expression invented by the new architects and the painters of the time. Elaborate "arabesque" and other formal designs gave employment to the carvers, in making an infinite repetition of fiddles, festoons, and ribbons, in the execution of which they became so proficient, that their work is more often admired for its exquisite finish than for any intrinsic interest in the subject or design.

Judged by its effects upon the art of carving, without the aid of which a national style of architecture is impossible, the revival of classical architecture never had a real and enduring life in it. Strictly speaking, no organic style ever grew out of its ambitious promises; the

nearest approach to such a thing is to be found in those uncouth minglings of Gothic tradition with fragments of classical detail which distinguish much of the domestic architecture during the sixteenth and seventeenth centuries. Amusing in their quaint and often rich and effective combinations, humanly interesting in proportion to the predominance of the Gothic element, association has grown up around these homely records of a mixed influence, until they have come to be regarded with affection, if not with the highest admiration.

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The "revival" brought nothing but harm to the carver himself—that is, to the carver who found it impossible to reach the elevation of a sculptor of genius. He sacrificed his own small but precious talent as a creator of pleasant images for the attainment of a finesse in the execution of other people's ideas. To the "Renaissance" must be attributed that fatal separation of the craftsman's function into the hands of designer and executant which has so completely paralyzed the living spirit of individual invention. It has taken close upon four centuries to open the eyes of our crafts-

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men to this inconsistency, and "revive" the medieval truth that invention and execution are strictly but one and the same thing. Let us hope that the present awakening to the importance of this fact may yet lead to what will be truly worthy of being called a "Renaissance"; not merely of outward forms, but of that creative energy which alone justifies the true meaning of the word.

NOTES ON THE COLLOTYPE PLATES

NOTES ON THE COLLOTYPE PLATES

PLATE I.—*Old Carved Chest in York Cathedral.* The front of a chest of almost similar design, only reversed, is to be seen in South Kensington Museum, which looks from its resemblance both in design and technique to be the work of the same carver, or at least to have been done about the same time. Note the absence of any attempt at elaborate perspective, and the "decorative" aspect of houses, rocks, trees, etc., also the distinctive treatment of the Knight and Princess who appear in the picture several times, representing various incidents of the story.

PLATE II.—*Figure from the Tomb of Henry IV in Canterbury Cathedral.* This figure is one of the corner ornaments on the canopy. The whole of the upper structure is of wood, painted in colors with parts picked out in gold.

PLATE III.—*Aisle Roof, Mildenhall Church, Suffolk.* This is one of the many beautiful carved roofs which abound in Norfolk and Suffolk. The nave roof is enriched with carvings of angels with wings outspread.

PLATE IV.—*Nave Roof, Sall Church, Norfolk.* This is another very beautiful timber roof showing the union of practical carpentry with carving to perfection.

PLATE V.—*Portion of a Carved Oak Panel. The Sheepfold.* The other part is shown in Plate VI, as, owing to the proportion of this panel and the necessity for keeping the scale of the plates as large as possible, it has been divided and shown in two portions. It was begun without any premeditated intention as to use, the sloping end being the shape of the board as it came into the author's hands, the other end being sloped off to match it.

PLATE VI.—*Portion of a Carved Oak Panel. The Sheepfold.* See description of Plate V.

PLATE VII.—*Preliminary Drawing of a Lion for Carving.* This plate is, as explained in the text, from a drawing by Philip Webb, the well-known architect. It was done by him to explain certain facts about the pose of a lion when the author was engaged in carving the book covers which are shown in Plates VIII and IX.

PLATES VIII and IX.—*Book-Covers carved in English Oak.* These were done by the author for one of the "Kelmscott Press" books, Tale of Troy, at the instance of Mr. Cobden-Sanderson. The relief is very slight, and is rather exaggerated by the light and shade of the photograph. The carved portion only of these covers is shown, the size of which is $11\frac{1}{2} \times 5\frac{3}{4}$ ins.

PLATE X.—*Book-Covers carved in English Oak.* These were done by the author for Mr. F. S. Ellis's translation of Reynard the Fox. The size of the carved part is $8\frac{3}{4} \times 5\frac{1}{4}$ ins.

PLATE XI.—*Carvings from Winchester Cathedral.* This plate is from sketches

made by the author at Winchester Cathedral. The upper one is a spandrel piece from the traceried arcading of the stalls. The lower one is a part of one of the carved Miserere seats. The spandrel carving is pierced; that is, has the ground cut right through. The other piece is elaborately undercut.

PLATE XII.—*Carving from Choir-Screen, Winchester Cathedral.* This plate is from a sketch done for the purpose of noting the general effect of a large mass of carved foliage with particular reference to the distribution of lighted surfaces in the design.

PLATE XIII.—*Font Canopy, Trunch Church, Norfolk.* The plate gives the upper portion only of this beautiful canopy; it is supported upon six posts richly carved on all sides, of which there are five to each post. The height of the whole canopy is about fifteen or sixteen feet—it presumably dates somewhere toward the end of the fourteenth century or beginning of the fifteenth.

PLATE XIV.—*Designs for Carving, by*

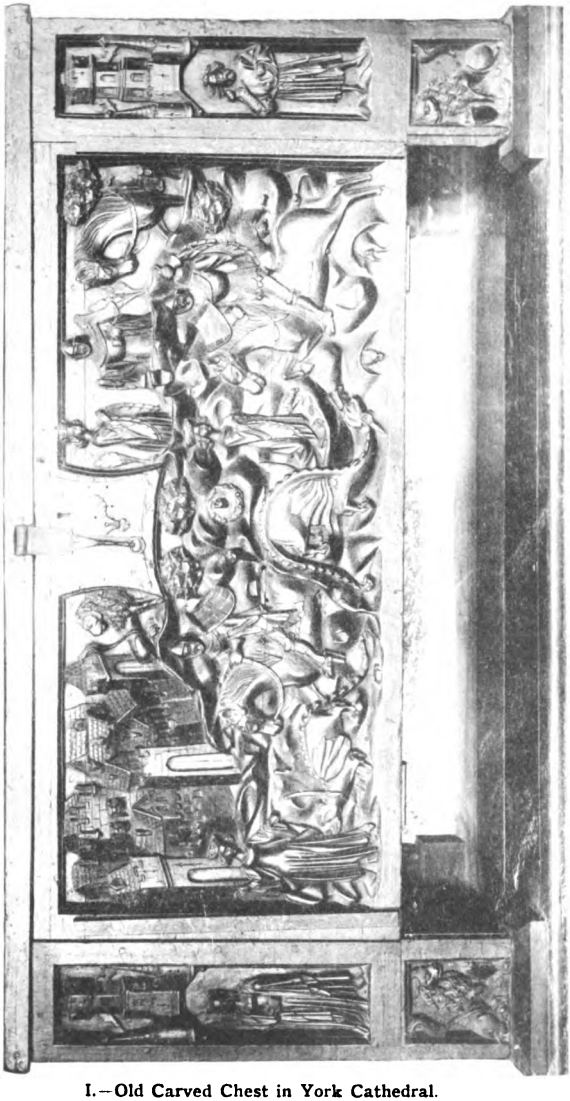
Philip Webb. This plate gives two examples of designs for carving by Philip Webb. The upper one is part of a richly carved cornice which was done for a chimney-piece; the carving was executed by Mr. Laurence Turner, from whom the author got his first lesson in wood-carving. The other example is a design on paper for carving to be done in oak. This was carried out in the paneling of the dining-room at Clouds House, Salisbury, and looked exceedingly effective. Much of the articulation on the surface of the leaves, it will be noticed, is got by sharp facets produced by the intersection of gouge cuts.

PLATE XV.—*Leg of a Settle carved in English Oak.* This was begun by the author as forming part of a large oak seat or "settle," but has never been completed. The wood out of which it is carved came out of an old house at Tewkesbury and was full of cracks which were filled up with slips of oak glued in and carved over.

PLATE XVI.—*Pew Ends in Carved Oak, Brent Church, Somersetshire.* The three

bench ends shown in this plate are from Brent Church, Somersetshire. Although rude in execution, they are extremely effective in design. The bounding form of the molded edges and gracefully shaped top are worth noticing; the whole evidently the outcome of a nice and inherited sense of design, without any particular technical knowledge or experience. The termination of the finials was unfortunately omitted in the photograph, hence the abrupt line at the top.

THE COLLOTYPE PLATES



I.—Old Carved Chest in York Cathedral.

II.—Figure from the Tomb of Henry IV. in Canterbury Cathedral.

III.—Aisle Roof—Mildenhall Church, Suffolk.

IV.—Nave Roof—Sall Church, Norfolk.

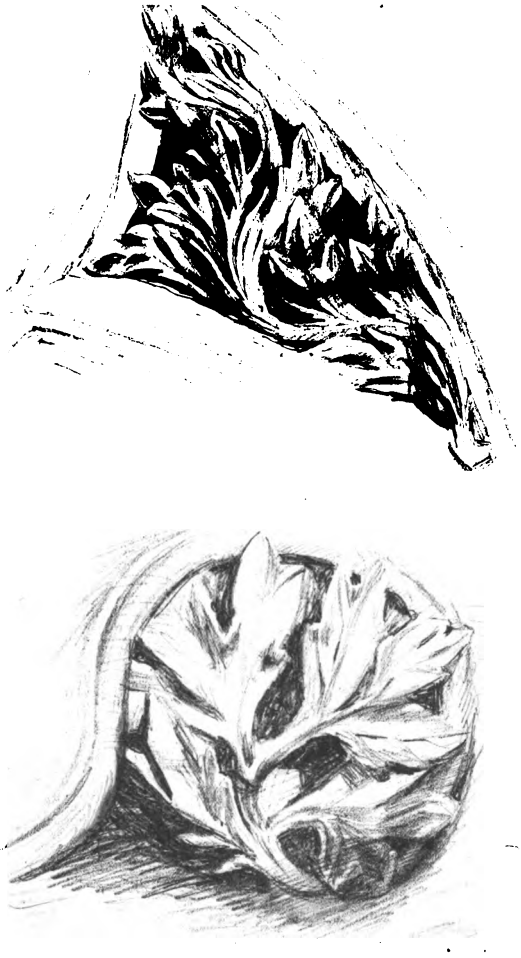
VI.—Portion of a Carved Oak Panel—The Sheepfold.

VII.—Preliminary Drawing of a Lion for Carving. By Phillip Webb.

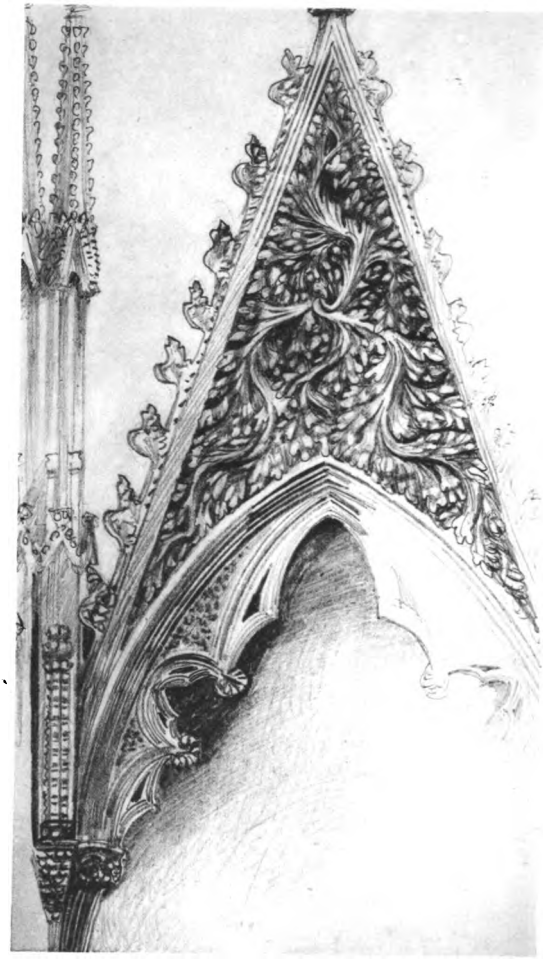
VIII.—Book Cover Carved in English Oak—"Tale of Troy."
(only carved portion shown.)

IX.—Book Cover Carved in English Oak—"Tale of Troy."
(only carved portion shown.)

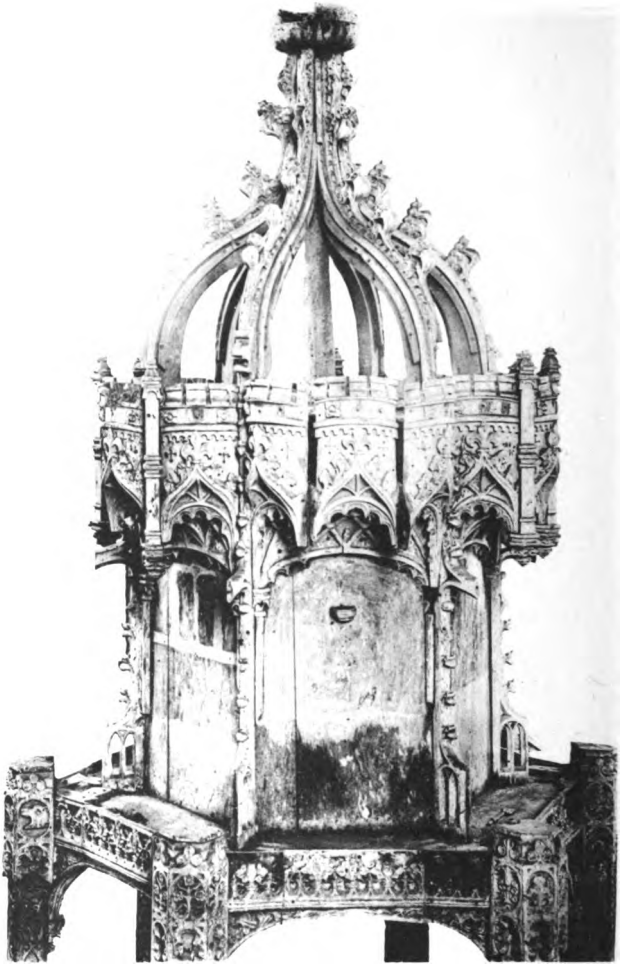
X.—Book Cover Carved in English Oak—"Reynard the Fox. (only carved portions shown.)



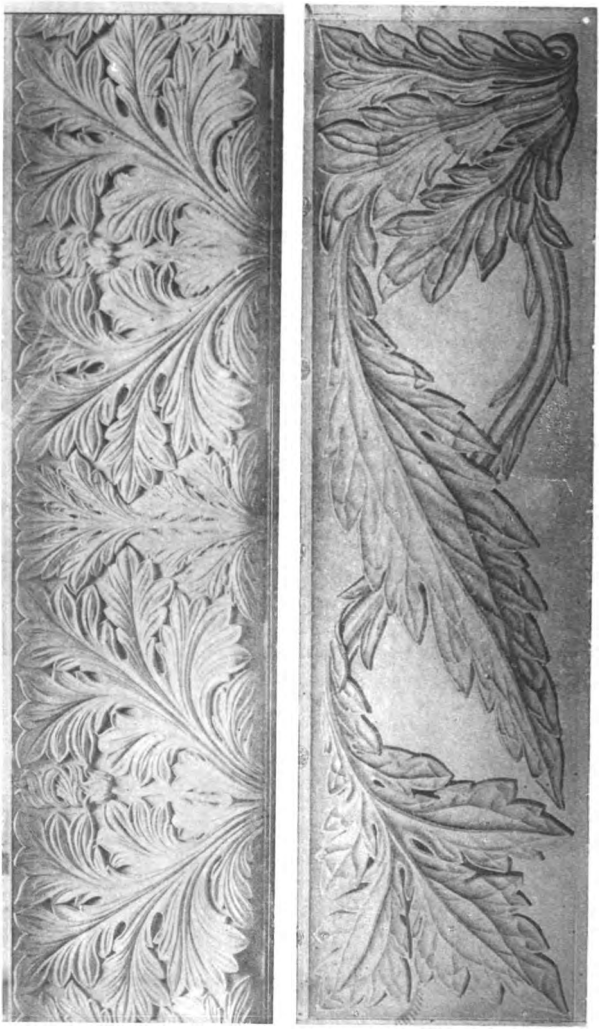
XI.—Carving from Choir Stalls in Winchester Cathedral.



XII.—Carving from Choir Screen—Winchester Cathedral.



XIII.—Font Canopy—Trunch Church, Norfolk.



XIV.—Two designs for Carving, by Philip Webb.
One executed, one in drawing.

XV.—Leg of a Settle, carved in English Oak.

XVI.—Pew Ends in Carved Oak—Brent Church, Somersetshire.

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THE END